M. Sc. F.

TAXATION
OF THE
FOREST INDUSTRIES IN ONTARIO

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FOREWORD

This extensive survey of taxation of the forest industries in Ontario is exploratory in nature. It attempts to clarify the relationships between taxation policies and forest policies, between taxation and forestry. A broad interpretation of taxation has been taken and in so doing the problems involved in stumpage and forest tenure have been studied.

As a result of this study, the author hopes that some of the problems of forest taxation will have been more clearly defined for future intensive investigation, and that interest will be aroused in company and government officials to discuss these matters fully.

On August 29, 1952 an agreement was signed between the Federal and the Ontario Governments whereby for a certain annual subsidy the Provincial government agreed to suspend its personal income tax and all corporation taxes except those on mining and logging income. This agreement while anticipated, was not in effect when this thesis was prepared and therefore could not be allowed for. Its operation should bring about certain tax reforms which many people have urged and which the author calls attention to in this study.

The assistance of men in the forest industries and the federal and Provincial governments is gratefully acknowledged along with the guidance and advice given by the faculty members of the Faculty of Forestry and the Department of Political Science and Economics of the University of Toronto. The award to the author of one of the Spruce Falls Power and Paper Co. Fellowships in Forestry and

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Ottawa, September 1952. George C. Wilkes.

Chapter I

TAXATION AND FOREST RESOURCES

Taxes and forests both possess unique features which give them each their character. As the fields of taxation and forestry overlap, an understanding of these features and their relationships is essential if we are to develop administrative policies which do not conflict but rather promote the most effective use of all our resources.

Philosophy of Taxation

A philosophy of taxation is largely the political approach to the problem of raising monies for government. It is a system, a way of taxing the people, which embodies certain purposes and principles and whose form will be altered with progress in political and economic thought. A tax philosphy itself is but one facet of a larger body for it forms an integral part of the people's philosophy of government.

Purposes of Taxation

A country's taxing policies give expression to its tax philosophy - or attempt to do so. And the first thing to be established with any policy is its purpose or purposes. Broadly there are two of these; financial and non-financial, Somers ((81) p. 132). Financial purposes include the raising of revenues while the non-financial envisage ends such as the exclusion of a foreign product from the domestic market or the discouragement of the export of such a commodity as saw logs.

It will be realized that both financial and non-financial aims are achieved by most taxes, intentionally or otherwise, and therefore both ends are implicit in any tax policy. In one tax the financial purposes are stressed, in another, the non-financial purpose will be accented. As these purposes are at the base of any tax policy, they should be clearly understood and foreseen whenever an alteration is proposed in the taxation system.

Principles of Taxation

The framing of a tax or a tax structure aims usually at conformance to certain accepted principles. These principles which are taken as guides in the choice of taxing methods have been considered by philosophers and economists over the centuries. Adam Smith upheld four maxims of taxation, Smith ((79) pp. 777-778); equality of taxation, certainty as contrasted with arbitrary imposition, convenience of payment, and economy of collection. H. L. Lutz ((53) pp. 275-291) established seven guides for taxation which are more useful when we consider the complex tax problems of today. He states that taxes should be adequate and productive of revenue, equitable, elastic, economical, simple in application and administration, diversified, and constitutionally flexible. H. M. Groves ((41) p. 25) believes that the rationality of a tax, its effects on social inequalities, its effects on the economy, and its practical aspects must always be measured and weighed in balance. In this view, the ends whether anticipated or not, are important in selection of the means to their achievement.

In support of these philosophical precepts, certain more practical principles have been evolved for the levying of a tax. The most important of these are: the ability to pay; the benefits received; earned versus unearned income; full employment; and expediency. Generally the taxes in Ontario are based upon one or more of these principles.

It is not the purpose of this thesis to discuss the merits or demerits of these principles. Rather they will be borne in mind when the practical effects of the taxes paid by the forest industries are considered. It is sufficient to say that the principles are not easy to apply or use as bases for they involve subjective estimates and valuations whose validity will vary for each individual.

Forest Resources

Qualities of the Forest

Forests have certain distinctive qualities. First and foremost, they are a renewable living asset: succeeding generations may continue to possess forest wealth provided the necessary steps are taken to obtain forest regeneration. However, like many other living organisms, trees require constant protection from attack by disease and insects. Second, forests are variable in composition. This variability sometimes creates problems, yet it is a feature providing flexibility in the forests as an industrial resource and as a protection against erosion. Third, forests are able to utilize land which may be economically unsuitable for any other purpose. Fourth, forests require time to reach economic maturity - usually

longer than a human generation. This factor is the basis of many problems: (1) financing forest management; (2) ensuring continuity of forest policy; (3) providing adequate reserves for the forest industries - especially in estimating future requirements; and (4) in reaching solutions in forest research. Yet while this time element demands all our skill in trying to read the future and urges us to think now for the decades ahead, it does allow us time within limits to adapt the forest resource to meet changing conditions and requirements.

Forest Condition

Canada's forest resources in 1952 are still extensive. Accessible productive timber lands cover almost 484 thousand square miles, of which over 147 thousand are in Ontario.[1] Yet we cannot be satisfied for our forests are no longer as great as they once were. Many factors have contributed to the destruction and mismanagement the fine timber stands of the past. Fires and excessive cutting by men under the belief of inexhaustible timber supplies are outstanding causes. To these must be added an apparent lack of reconciliation of taxation and tenure policies with other policies affecting the forests.[2] And in the train of these conflicts -- often basic -- followed attitudes and actions by government officials, company executives, and individuals which sometimes have worsened the prospects of establishing proper forest management.

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1. See the Appendix to this chapter for more detailed data of the forest inventories for Ontario and for Canada as a whole.
2. For example: the reductions in incentives for company investment in forest management as a result of high income tax rates; problems concerning stumpage and equity in future stands of timber resulting from sustained yield; etc. This point is expanded in succeeding chapters.

Economic Significance

Because of their extent and high quality, Canada's forests provide the raw materials for one of the large sectors in the Canadian economy. This sector is integrated with and supports the others to such a degree that failure of our timber supplies would greatly depress Canada's high standard of living.

The Canadian people and Canadian industry are well aware of the economic importance of the wood from the country's forests. They know that the woodsmen following in the paths of the fur traders played a significant role in Canadian history from the eighteenth century up to the present day. The labours of these men have gone to strengthening trade connections with Great Britain and the United States, to supporting the development of transportation facilities and the forest industries, and to assisting the successful operation of other primary and secondary industries. The Appendix to this chapter contains statistical data indicating the economic value of the forests and forest industries for both the Province of Ontario and Canada as a whole. These data show that these forest and industrial resources are essential to Canadian economic and social life and are likely to remain so.

Although the uses of timber are well known, the non-timber values of the forests are only now being given their proper recognition. This is largely because such values are difficult to express in dollars, in employment, or as sources of income. Can Canadians

adequately measure the pleasure and recreation that the forests yearly provide? Can they evaluate the protection timbered lands give to wild life, to soil, and even to homes? Yet if we fail in suitable expression of these values, their vital importance to the country should not be disregarded or dismissed.

Of prime economic importance is the ratio of the annual growth of new wood in the forest to the annual depletion of mature timber. At present almost nothing is known concerning this ratio either for Ontario as a whole or for the different forested regions. Experienced observers state that in many localities the ratio is badly out of balance, that severe over-cutting is taking place, Ontario ((71) pp. 16, 17, 41, 42, 71-73). In some areas a balance has probably been struck. But the lack of precise information indicates the urgent need for reliable data on this matter.

Interests Involved in the Forest

Direct responsibility for the administration of Ontario's forests lies with the Provincial government.[1] Ultimately it rests with each inhabitant of the Province. If he holds cutting rights from the Crown, an individual may be held directly accountable for those lands. As corporate individuals, the forest industries are in a similar position. Considering the large proportion of forested land owned by the Crown,[2] there can be no dispute as to the prime position of the Provincial authorities in the field of

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1. For more detailed discussions of this matter see
2. See appendix, pp. 10 and 11.

forest management.

The common element in these interests is the perpetuation of the forest resource in the healthiest and most productive state possible under the conditions set by the economy in the widest sense. Such conditioning factors would include: (1) the amount of money which can be spent at any time on all phases of forestry and the amount which will be spent on any particular phase; (2) other claims on the financial resources of government, industry, and the community at large; (3) limited scientific knowledge concerning the forests and their proper management and limited research on the problems involved; (4) the rate of progress in technological and industrial research for the optimum use of forest products; (5) present and future market conditions for forest ... and wood products; and (6) the cultural and economic institutions of society such as the constitution, property, and capitalist enterprise.

Taxation and Forest Resources

Certain unique relationships exist between taxation and forestry. Where the two fields overlap, the qualities of the forest mentioned above are the factors which should give forest taxation policies their characteristic form.

Forests unlike minerals are renewable assets. This fact should give stability and long life to the forest industries while a mine's existence is limited to the extent of the ore body. Therefore if the forests are managed and not merely mined they will

continue to contribute their share to government revenues long after many mines are exhausted. For this reason tax policies as related to the forests should be considered as much from the long-term as from the short-term point of view.

The extensive distribution of the forests, and the variability of their composition and quality are two of the bases for Canada's broad and diversified forest economy. And because the forest economy is broad, governments may spread their taxes more widely. Tax revenues will be more elastic than if the forest economy were narrow.

Because of the multiplicity of forest values, the forest sector of the country's economy is tied closely to other sectors such as the tourist industry and trapping. If taxation policies are such as to discourage the forest industries from taking adequate care of their forest resources, these other industries might suffer adverse effects.

The time element involved in forest management urges that tax policies be stable. Uncertainty, hazy purposes, and vacillating attitudes to taxation will have repercussions on the forests. Forest authorities generally agree that the returns on investments in managed timber lands will be somewhat lower than on investments in other business enterprises where the turn over in capital is rapid. If these forest investments are to be

encouraged, stable and fair tax policies are imperative. Furthermore, tax regulations may be designed to reduce risk and overcome the reluctance that company executives show in making long-term forest investments.

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In the long-run the revenues of government will remain most bouyant just as long as the economy is most prosperous. And that sector of the economy based upon the forests, with the help of government and the community, must ensure that the forest resources are not deprived of the necessary funds for their good management. A close attention to tax policies by all parties is an essential in this regard.

Appendix I

This appendix contains certain forest statistics for Canada and the Province of Ontario. A comparison of the Provincial and Canadian data will provide information concerning the relative importance of the Provincial forest economy as a part of the country's whole economy and of that part which is based upon the forests. In addition to these statistics a brief statement provides the highlights of the present form of administration of Ontario's Crown forests.

Forest Inventory, 1951

In Square Miles

	Ontario	Canada*
Total Forested Land	237,200	1,299,759
Total Productive Forest	173,800	712,452
Accessible Productive Forest	147,600	483,809
Productive Forest by Cover Types and Size		
All Types - Merchantable Timber	66,900	301,341
Young Growth	106,900	411,111
Softwood - Merchantable Timber	36,900	210,131
Young Growth	29,300	182,269
Mixedwood - Merchantable Timber	24,100	68,576
Young Growth	67,400	146,509
Hardwood - Merchantable Timber	5,900	22,634
Young Growth	10,200	82,333

* Exclusive of Labrador

Tenure of Occupied Forest Land, 1951.

In Square Miles

	Ontario	Canada*
Occupied Crown Lands		
Pulpwood Licences	66,254	158,125
Saw Timber Licenses	12,095	35,135
Other Tenures	--	3,960
Totals	78,349	197,220
Privately Owned Forest Land		
Farm Woodlots	6,039	32,594
Other Private Forests	8,201	64,114
Totals	14,240	96,708
Total Occupied Forest Land	92,589	293,928

* Exclusive of Labrador

Inventory of Accessible Timber of Merchantable Size, 1951

	Ontario	Canada*
Saw Timber - M.M. F.b.m.		
Softwoods	42,775	212,130
Hardwoods	11,529	33,069
Totals	54,304	245,199
Smaller Material - M. Cords		
Softwoods	261,515	1,101,425
Hardwoods	300,380	617,311
Totals	561,895	1,718,736

* Exclusive of Labrador

Production and Other Economic Statistics

	Ontario	Canada
Output of Primary Forest Products - M. Cu. ft. Merchantable Timber		
1948	654,268	3,198,179
1949	632,202	3,140,137
Lumber Production-M. F. b. m.		
1948	760,198	5,908,798
1949	793,039	5,915,443
Value of Lumber Production - $ Millions		
1948	46.9	340.9
1949	49.8	334.8
Principle Statistics of All Forest Industries		
1948		
No. of Employees	104,853	350,620
Salaries and Wages - $ Millions	215.6	762.6
Gross Value of Production - $ Millions	779.1	2,494.9
Net Value of Production - $ Millions	403.2	1,376.9
1949		
No. of Employees	89,306	324,223
Salaries and Wages-$ Millions	202.1	754.3
Gross Value of Production - $ Millions	764.7	2,494.8
Net Value of Production - $ Millions	406.1	1,373.1
Net Value of Production of All Industries $ Millions		
1948	3,758.3	9,351.5
1949	4,114.8	9,997.1

Inventory data are from the bulletin - FOREST AND FOREST PRODUCTS STATISTICS, Canada (15). Production and other economic statistics are from relevant publications of the Dominion Bureau of Statistics and the THIRD ANNUAL ECONOMIC REPORT for the Province of Ontario, (66).

Note

Without repeating details for the disposal of Crown timber and the payment of stumpage dues and other Crown charges reviewed in later chapters, two salient features in the forest management policies of the Ontario government may be noted: the leasing and licensing system and the requirements to institute management programs on leased and licensed lands.

The two chief means whereby timber is obtained from Crown lands, are by timber licences renewable annually and by pulpwood agreements for 21 year periods renewable for further periods. Timber agreements have been signed for 10 year periods subject to the annual renewal of the timber licence. These forms of tenure are more fully described in Chapter V.

Ontario's expressed policy is that the Province's forests shall be managed to yield periodic timber crops in perpetuity. Management plans are required of all companies with large holdings. The aim of these plans must be a sustained yield of wood. The Provincial authorities are responsible for the smaller areas

and those presently unalienated. Through joint efforts on the part of government and industry, the forests are to be brought under forest management plans.

Chapter II

AN HISTORICAL OUTLINE OF TAXES AFFECTING THE FOREST INDUSTRIES

Forest Taxation in Ontario up to the Twentieth Century

Prior to Confederation[1]

Before the beginning of the nineteenth century Canadian forest resources contributed little to the revenue needs of the colonies. With the passing of the Constitution Act in 1791, Upper Canada was created and provided with a rather simple structure of government. Its funds were derived largely from the imperial government, from a share in the customs levied at Quebec and Montreal, and from similar tolls raised in trading on the Great Lakes. Municipal revenues and a small portion of provincial money came from property taxes.[2]

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1. Annual Report of the Clerk of Forestry for the Province of Ontario, 1899. Cited hereafter as Report of 1899. The author has drawn extensively on this report for material in this section.

2. By the act 14 George III, Chap. 83 (Great Britain), 1774, a measure of self government was given to what was then the Province of Quebec. This included Ontario. The legislative council authorized by Section 13 could not levy taxes but was to raise money for local purposes by means of property taxes. This part of this act remained in force when the Constitution Act of 1791 - 31 George III, Chap. 31 (Great Britain) - was passed. This established the Provinces of Upper and Lower Canada. The Upper Canada act 33 George III, Chap. 2 (Upper Canada) provided for the appointment of local assessors. This note does not fix the date when local property taxes were first authorized in the territory which is now Ontario but it does show how long they have been established.

In 1808 the government of Lower Canada imposed a tax on scows of lumber and cribs of square timber passing through the St. Lawrence rapids between Chateauguay and Montreal.[1] The monies collected were to provide a fund for improvement of inland navigation on the St. Lawrence River. Timber operators bringing their rafts down from the Ottawa contributed their share to this fund.

In Upper Canada, authority for the sale of timber was first issued by the Lieutenant Governor, Sir Peregrine Maitland, in a proclamation dated 1826, Report of 1899 ((67) pp. 49 and 50). Under instructions from the Commissioner of the Treasury in England, the Surveyor General of Woods and Forests was to grant licences on unalienated Crown lands on the Ottawa River. To obtain a licence the operator had to agree to pay the rates set by the Commissioner for Crown Lands. The year 1827 saw timber licences up for auction for the first time.[2] Thus began the system whereby the purchasers, in bidding for the licences, came to pay a sum or bonus over and above the initial or reserve price set by regulation. A penalty of double the price (dues) was to be exacted from any operator cutting timber which did not square 8 inches or over. There are two points of interest here. First, a very embryonic form of timber management[3] was tied in with revenue producing regulations. Second, the introduction of stumpage as

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1. 48 George III, Chap. 19 (Lower Canada).
2. Report of 1899, p. 50. While the auction of limits was introduced at this date, the practice of granting them to the highest bidder did not become general until after 1842. See Report of 1899, pp. 62, 63, and 82.
3. By preventing the cutting of timber until it had "attained suitable growth", the government may only have been seeking to preserve the lumber trade rather than the forests. It is difficult to assess the meaning of these words today.

a source of revenue was effected by regulations issued by the Commissioner of Crown Lands and not by statute.

It was not until a Select Committee of the Legislature of the united Province of Canada had reported in 1849 on the state of the forests and timber disposal, Canada (12a),that the government enacted legislation embodying its previous timber regulations. This was an act for "The Sale and Better Management of Timber on Public Lands".[1] The Select Committee's report recommended charging an annual ground rent as well as timber dues in order to prevent any monopoly or speculation in licences. However this recommendation was not adopted until 1851, Report of 1899 ((67) p. 79).[2] Regulations for that year imposed an annual rental of two shillings six pence per square mile or a minimum rental of £1 per licence. In addition, these charges were doubled each year if the limit were not occupied by the licence holder. The government also doubled the dues on saw logs which were cut and then exported. This was done to discourage the export of unmanufactured logs to American mills.

In 1854 another Select Committee of the Legislature conducted hearings on the management of the forests. They examined the American system for timber disposal by sale of timbered lands.

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1. 12 Victoria, Chap. 30 (Canada).

2. See Chap. III p. 75 for further details concerning the purpose of charging ground rent.

Under this system land, upon which there was an upset or reserve price of $1.25 per acre, was auctioned for sale. In this way the government believed it encouraged settlement of timbered agricultural lands. They also believed that any lands where the timber was poor in quality would have the timber cut if the land were sold and that the timber would remain uncut if disposed of by a timber licence. Furthermore, it was also held that the sale of lands created a better basis for property taxation than if lands were only leased. The Committee rejected this method as being unsuitable for Canada, and gave their support to the government's licensing system, Canada (12b). The Committee believed that the American system would hinder orderly settlement and mean lower revenues to the Crown. Nine years later another Select Committee examined the lumber trade and the disposal of cutting licences. While no final report was ever prepared by this Committee, an interim report gives the evidence it gathered at its hearings. This shows that the members were concerned with an apparent insecurity of tenure of timber lands under the licensing system because of its effect on the prosperity of the lumber industry and the protection of the forests. They urged improvements to give the licensee a more secure tenure, Canada (12c).[1]

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1. Insecurity of tenure was apparently of little consequence for the regulations of 1866 made no change in licence renewal practices.

Regulations issued in 1866 clarified the system of disposal of licences by auction with a minimum reserve or upset price to be established by the Commissioner for Crown Lands, Report of 1899 ((67) pp. 98 and 99). These regulations continued in force through the transition period at Confederation.

During the year 1864 the Legislature passed an act replacing an earlier statute for the incorporation of joint stock companies. This Act [1] introduced the fee for incorporation. It continued in force after Confederation until replaced by separate federal and provincial legislation.

The Allocation of Taxing Power and Natural Resources at Confederation

Confederation wrought many changes in the Canadian provinces. Under the British North America Act, [2] the central government took over provincial problems in trade and commerce. It pushed ahead the settlement of the west and the building of the transcontinental railroads. By leaving broad issues to the federal government, the provinces were free to concentrate their efforts on internal development. Naturally adjustments to the new arrangements ran into some difficulties. In fact, the new divisions of taxing power and responsibility for natural resources were to raise serious problems many years after 1867.

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1. 27 - 28 Victoria, Chap. 23 (Canada).
2. 30 - 31 Victoria, Chap. 3 (Great Britain). Cited hereafter as the B.N.A. Act.

By Section 91 of the B.N.A. Act the federal parliament received the power to legislate for "peace, order, and good government of Canada" in relation to matters broadly of concern to the Canadian people as a whole. The provincial legislatures were allowed to make laws on all matters enumerated in Section 92 of the act. These particularly concerned the people within each individual province.

With this division of powers went financial resources believed to be adequate to their proper functioning. The central government obtained the authority for direct and indirect taxation, the control of credit, currency, banking and tariffs, and the power to borrow on the country's credit. The provincial governments could raise revenues by direct taxation within the province, by borrowing on the province's credit, through the control and development of natural resources (unless specifically reserved to the federal government), and through the issuance of certain licences. Because it was recognized that the provinces yielded their most fruitful sources of revenue - customs and excise taxes - to the central government, a schedule of subsidies was set out, supplemented by certain grants-in-aids. As creatures of the provincial legislatures, the municipalities' functions and finances were controlled by these bodies. Municipal revenues come from direct taxation of business and property, direct sales taxes, the issuance of licences, provincial grants, and the operation of public utilities.

Taxing Powers of the Federal Government

Prior to 1867 the taxing powers of the provincial legislatures as granted by the imperial parliament, tended to expand as the country became settled. The B.N.A. Act placed the power to tax with the British parliament, the new Dominion parliament, and the provincial legislatures. An account of the legal power to tax that was held by the British government may be found in Kennedy and Wells' study, "THE LAW OF THE TAXING POWER IN CANADA", Kennedy (50). When the British parliament in 1931 passed the act known as the Statute of Westminster,[1] it gave up any taxing power it held in Canada. In addition, by this act no statute of the dominion governments could be held void it it happened to be repugnant to some British legislation.[2]

Section 91, subsection 3, of the B.N.A. Act gives the federal government power to make laws relating to "the raising of revenue by any mode or system of taxation". This emphasizes clearly the sovereign position of the central government. Both direct and indirect taxation may be resorted to. Therefore neither the nature nor the purpose of the tax has any limit. These facts should be viewed in the light of subsections 14, 15, 16 and 19 of the same section. These are the subsections giving Ottawa ex-

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1. 22 George V, Chap. 4 (Great Britain).
2. Ibid, section 2, subsections 1 and 2. The old Colonial Laws Validity Act became inoperative in the dominions.

clusive control over money and banking - powerful factors setting the framework in which our economy operates and within which the provinces' financial autonomy functions.

Legal authorities hold that the federal taxing powers are limited by Sections 121 and 125 of the Act. Section 121 prohibits any tariff on interprovincial trade - a ruling applicable to the provinces as well. Section 125 provides that "no lands or Property belonging to Canada or any Province shall be liable to taxation".

In an article in the Canadian Bar Review, V. C. MacDonald, ((55)p. 77) points out that tax legislation must be in substance a measure to tax. It must not be a disguised means of attaining some other purpose beyond the authority of the government.

Taxing Powers of the Provincial Governments

The Province of Ontario's taxing authority, as that of all provinces, derives from subsections 2 and 9 of Section 92 of the B.N.A. Act. Subsection 2 limits a province to raising revenue by direct taxation within the province for provincial purposes. Subsection 9 grants a province the right to impose licences for raising money for provincial, local, or municipal purposes.

The definition to be given the term "direct taxation" is that of John Stuart Mill ((61) p. 823), which was current when the B.N.A. Act was passed. Court rulings since 1867 have

given the definition absolute force. If it is to be altered, a constitutional amendment is necessary for it is a point no longer open to judicial review. Mill stated a direct tax to be "one which is demanded from the very person who is intended or desired should pay it". Lord Cave in one of his judgments stated, "It is the nature and general tendency of the tax and not its incidence in particular or special cases which must determine its classification and validity", MacDonald ((55)p. 80). If at the moment of payment its incidence is obscure, a tax is indirect.

The limitation of direct taxation does not necessarily apply to taxes in the form of licence fees imposed under subsection 9.

The B.N.A. Act provided definite limitations to provincial taxing powers other than those of subsections 2 and 9. No provincial tax could destroy powers of operation conferred by the federal government on any body - for example a federally incorporated company. In addition, the federal government was given the powers of disallowance and reservation of any provincial legislation.[1] This legal right has been modified by constitutional practice. If in doubt, the validity of any provincial tax legislation

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1. B.N.A. Act, op. cit., Sec. 90.

would be tested today in the courts, Kennedy ((50) p. 45).

As the provincial taxing powers coincided with certain of the federal powers, disputes were bound to arise. These have been settled by the courts. To this point the following judgment is pertinent, "the two taxations, Dominion and provincial, can stand side by side without interfering with each other, but as soon as you come to the concomitant privileges of absolute authority, they cannot stand side by side and must clash; consequently the Dominion must prevail", Wheare ((87) p. 112).

Taxing Powers of the Municipal Governments

A municipality's power to tax derives directly from the province. The B. N. A. Act allows any province to delegate to a municipality any of the powers within provincial competence. Thus municipal governments are restricted to direct taxation and the raising of revenues by licensing.

The Allocation of Natural Resources.

By subsection 5 of section 92 of the B. N. A. Act, the provinces received control of the forested lands within their borders. They are permitted to raise revenues from the sale or lease of Crown Lands. Responsibility for the care of the forest resources rests with the provinces. The central government retains control of lands vested in its name and which lie within provincial boundaries - for example, canals, public

harbours, Indian reserves, military lands and those set aside for general public purposes.[1] Up until 1930 the federal government managed the natural resources of the prairie provinces. This made possible the federal government's free homestead policy; the provincial governments received payments in lieu of revenues they might have obtained from the disposal of land, timber, etc. Of the Crown forests within provincial boundaries today, those only on federal forest experiment stations and national parks are administered by Ottawa.

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The above sections provide an outline of the results of Confederation as they affected the fields of taxation and natural resources. Some of the later modifications and interpretations of the powers delegated under the B. N. A. Act are given. It is now necessary to describe developments in the tax systems of the federal and Ontario governments following 1867.

Taxation Changes from 1867 to 1900

Federal Taxes

At Confederation the federal government obtained the exclusive use of the tariff and excise taxes. These remained the chief source of federal revenue until well into the twentieth century. The thirty-three years reviewed only witnessed changes in the rates and structure of these taxes. In 1879,

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1. B. N. A. Act. op. cit., Schedule 3.

following the defeat of the Liberal government in the previous year, the Conservatives increased tariff rates sharply as part of their National Policy. Tariffs continued to rise until 1889 when the peak was reached. In 1896 the Conservatives were defeated. The new Liberal government immediately introduced the British Preferential Tariff which applied lower tariff rates to British goods. This policy has become a feature of the Canadian tariff structure and found its fullest interpretation in the Ottawa Agreements of 1932.

Excise duties also rose slowly following Confederation but in 1900 were still but a fraction of their present values.

The first federal act to incorporate companies and repealing previous acts passed by the Province of Canada, was enacted in 1869.[1] It levied fees for incorporation,

Provincial Taxes

Following 1867, Ontario continued to derive revenues from the sale of forest and other lands and from licences. These were augmented by the federal subsidies. In 1874 fees were charged for incorporation of companies under a new provincial statute.[2] The legislation covering the sale and

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1. 32 - 33 Victoria, Chap. 13 (Canada). This repealed the earlier statute of the Province of Canada.

2. 37 Victoria, Chap. 35 (Ont.). This repealed the earlier statute of the Province of Canada.

management of timber was repeatedly amended and in the Revised Statutes of Ontario 1897 its title became "The Crown Timber Act".[1] The year 1892 saw Ontario enter the succession duties field.[2] Corporation taxes were levied for the first time in 1899.[3] Thus by 1900 Ontario's tax system had become quite complex.

Municipal Taxes

Personal and real property taxes continued to be the mainstays of municipal revenues in Ontario during this period. Income taxes were levied by some municipalities. But generally speaking the local tax systems remained comparatively simple.

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Goverment in the nineteenth century viewed taxation warily. In keeping with the expansion of settlement and trade, government must be a help not a hindrance. This attitude became established especially after the end of British mercantilism. It is true that Canadian governments and merchants tried to stay the passing of this era in trade between Canada and Britain, Creighton ((31) pp. 83, 103, 107). Yet they were

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1. R.S.O. 1897, Chap. 32.
2. 55 Victoria, Chap. 6 (Ont.)
3. 62 Victoria (2), Chap. 8 (Ont.).

among the first exponents of "free trade" with the United States. For in this area such an approach best served the development of industry and the spread of settlement. From this interest in industrial growth came the protectionist attitudes of the later years and the reliance of governments on customs and tariffs, the sale of land and timber, licence fees, and on property taxes as sources of revenue. These did not interfere greatly with industry and aided the agricultural policies of the day.

As the lumbermen moved westward through the pinelands of Ontario, many people voiced concern over the conditions left in the loggers' wake. The first timber regulations and statutes did not set out to prevent destruction of the forests. They came as reforms to an outmoded timber disposal system. Although they hardly prevented speculation, these acts provided some freedom, stability, and order in the disposition of timberlands. Later they ensured that the Provincial government received some if not all of its proper dues. The Government was able to draw in large revenues from this resource as the needs of the Treasury increased.

This survey shows that there was little attempt up to 1900 to influence forest management by means of taxation. Probably the two fields were rarely associated in the politicians' minds for few were worried about the forests or interested in their management.

Twentieth Century Tax Developments

Federal Taxes

Up to the First World War the federal government relied upon its indirect taxes - customs and excises - to meet Treasury requirements. Corporations and unincorporated businesses in Ontario, as elsewhere, were free of such burdens or their effects as federal income taxes, sales taxes, and succession duties. In 1916, the Business Profits War Tax Act[1] was passed. This levied a 25% tax on all profits of an incorporated business exceeding 7% of the capital employed in the business. Unincorporated businesses paid a lower tax rate. The forest industries made their fair contribution to these taxes. At the end of 1920 the tax was repealed. By that date amendments to the act had introduced a graduated scale of rates.

Midsummer 1917 saw the inception of the first federal personal income tax and a corporate profits tax.[2] The latter was payable only if it exceeded the business profits war tax.

In 1918, Ottawa introduced the first sales tax into Canada under the Special War Revenue Act.[3] It was a tax on automobiles. The federal government in 1920 first levied the general sales tax, much as we know it today. Equipment used in logging

1. 6-7. George V, Chap. 11 (Canada).
2. 7-8. George V, Chap. 28 (Canada).
3. 8-9. George V, Chap. 46 (Canada).

operations was and still is exempt from the tax. The products of the natural resources industries were also free of tax. It was not until 1945 that the government granted exemption from the sales tax on machinery and apparatus used in the manufacture or production of goods. To be eligible for exemption such goods must be used directly in the manufacturing process - for example a paper machine may be purchased free of tax but office equipment would be subject to the tax.

The depression years of the 1930's witnessed little change in the federal tax system. Only adjustments of the tax rates occurred as the central government along with the provincial and municipal governments wrestled with mounting financial problems.

During the Second World War, the Canadian government levied taxes on excess profits [1] to be paid by incorporated and unincorporated businesses. In addition it levied a tax of three cents a gallon on gasoline. Both these taxes were removed after the war although the Province of Ontario incorporated into its own tax on gasoline the amount of the repealed federal tax.

Of greater significance at this time was the federal government's entrance into the succession duties field. In 1941 Ottawa passed the Succession Duty Act. [2] While of no

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1. 3 George VI (2), Chap. 4 (Canada).
2. 4 - 5 George VI, Chap. 14 (Canada).

great importance for incorporated companies, this act can create problems where forest industries are run as partnerships or proprietorships. Until the recent Income Tax Act was passed, private companies and partnerships suffered hardship under the combined effects of succession duties and taxation of undistributed profits. Under the most recent Income Tax Act, private companies may elect to pay the necessary taxes and capitalize these profits.[1]

In 1952, Ottawa levied a surtax of 2 per cent on corporate and personal income as well as 2 per cent tax similar to the general sales tax. The money from these taxes goes to pay for federal old age pensions.[2]

In summary then, the Income Tax Act[3], the Succession Duty Act[4], and the Excise Tax Act[5], are probably the three federal tax acts of importance to the forest industries in Ontario.

Provincial Taxes

By the turn of the century the tax system of Ontario had been pretty well defined. The most important tax legislation was in effect although many amendments were to follow. The Province

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1. 11 - 12 George VI, Chap. 52 (Canada), Sect. 95A.
2. 15 - 16 George VI, Chap. 18 (Canada).
3. 11 - 12 George VI, Chap. 52, (Canada), as amended with pertinent regulations. Cited hereafter as the Income Tax Act.
4. 4 - 5 George VI, Chap. 14, (Canada), as amended.
5. 11 George VI, Chap. 60, (Canada), as amended.

received revenue from corporation taxes, succession duties, the incorporation of companies, the assessments under the Crown Timber Act besides revenues from other sources such as the sale of lands and federal subsidies.

Although the present Highway Traffic Act was not passed until 1923[1], Ontario licensed motor vehicles as early as 1903[2]. In 1907, profits from the mines were taxed under the Mining Tax Act[3]. The fire protection tax on all licence and agreement holders under the Crown Timber Act was levied for the first time in 1917[4]. Although this was the first fire protection tax to be levied, prior to this date the forest companies did share some of the expenses of fire protection. The years 1921 and 1924 saw two minor taxes and one licence instituted in the Province - the Land Transfer Tax[5], the Provincial Land Tax[6] and the licence under the Mills Licensing Act[7]. The first based on the value of land, was paid at the time of the transfer of its title from one person to another; the second was levied on the value of all lands held in unorganized townships and not covered by a licence or an agreement; and the third was required by all operators of sawmills and pulp and paper mills. In 1925 the Province

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1. 13 - 14 George V, Chap. 48 (Ont.)
2. 3 Edward VII, Chap. 27 (Ont.)
3. 7 Edward VII, Chap. 9 (Ont.)
4. Report of the Minister of Lands, Forests, and Mines of the Province of Ontario, 1917. Sessional Paper No. 2, 1918, Toronto, The King's Printer.
5. 11 George V, Chap. 13 (Ont.)
6. 14 George V, Chap. 13)Ont.)
7. 14 George V, Chap. 17 (Ont.)

passed the Gasoline Tax Act[1] - a retail sales tax to be earmarked for highway improvements. (This tax today amounts to about one-quarter of the retail price of gasoline and in the fiscal year ending March 31st, 1951 yielded over one-third of the province's tax revenue). In the same year, 1925, the Railway Fire Charge Act was passed levying a fire protection tax on railway lands.[2]

During the depression years, the Provincial government sought to increase its tax revenues. The Corporation Tax Act was amended in 1931[3] so that all but certain specified corporations paid a percentage tax on the value of the company's paid-up capital. This base, besides paid-up capital stock, includes surplus and reserve funds (other than depreciation reserves), and capital indebtedness such as bonds, mortgages, debentures, notes, and income bonds and debentures. Up to 50 per cent of the book value is granted as an allowance on the value of goodwill, patents, franchises, etc. In 1932, the Province further amended this tax act[4] in order to levy a tax on corporate profits and a tax of $50.00 for each office operated in the province by a company. These taxes applied to all but the specified corporations which were taxed otherwise.

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1. 15 George V, Chap. 28 (Ont.)
2. 15 George V, Chap. 16 (Ont.)
3. 21 George V, Chap. 9 (Ont.)
4. 22 George V, Chap. 8 (Ont.)

Under the Wartime Tax Agreements which were in effect during the Second World War, Ontario[1] and the other provinces vacated the personal and corporate income tax and corporation tax fields in favour of the federal government. Thereby Ottawa was able to exploit these revenue sources to their maximum in order to raise war revenues. In exchange the federal government granted subsidies to the provinces. The Agreements were in effect for the years 1941 - 1946 inclusive.

After 1946 these tax fields again came under the purview of provincial legislation. The federal government attempted to arrange similar Tax Rental Agreements to run from 1947 to 1952. Ontario did not enter into such an agreement and reimposed its corporation taxes and corporate income taxes. It has not as yet resumed taxation of personal incomes.

Following the termination of the Wartime Tax Agreements, the federal government allowed as a deduction from taxable income under the Income Tax Act, any taxes paid to a province on account of mining or logging profits. In 1950 the Ontario government passed the Logging Tax Act.[2] By this act, the Provincial tax on logging income in excess of $10,000 was to be at a rate of 9 per cent rather than the standard rate of 7 per cent applicable under the Corporation Tax Act.

And so today, the forest industries pay taxes into the

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1. 6 George VI, Chap. 1, (Ont.)
2. 14 George VI, Chap. 39, (Ont.)

Provincial treasury under the following Acts: The Succession Duty Act[1]; the Corporation Tax Act[2]; the Crown Timber Act[3]; the Logging Tax Act[4]; the Provincial Land Tax Act[5]; the Land Transfer Tax Act[6]; the Gasoline Tax Act[7]; the Highway Traffic Act[8]; the Companies Act[9]; the Mills Licensing Act[10]; and the Railway Fire Charge Act[11]. Of these the corporation taxes, income taxes, succession duties, and the assessments under the Crown Timber Act stand out as the taxes of greatest significance to the industry.

Mention should also be made of the levies upon industry for unemployment insurance and workmen's compensation. The federal government imposes the former under the Unemployment Insurance Act[12] and the Ontario government administers the latter under the Workmen's Compensation Act[13]. These gross wage taxes are important to industry in the amount of extra labour involved in making returns to the two governments.

Municipal Taxes

The twentieth century has seen only one major change in municipal taxation in Ontario. This was the amendment of the

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1. Revised Statutes of Ontario, 1950, Chap. 378.
2. Ibid, Chap. 72.
3. Ibid, Chap. 82. Note: The Crown Timber Act, 1952, 1 Elizabeth II, Chap. 15 (Ont.) will replace R.S.O. Chap. 82 and R.S.O. Chap. 234 when proclaimed.
4. Ibid, Chap. 216.
5. Ibid, Chap. 309.
6. Ibid, Chap. 198.
7. Ibid, Chap. 157.
8. Ibid, Chap. 167.
9. Ibid, Chap. 59.
10. Ibid, Chap. 234.
11. Ibid, Chap. 330.
12. 4 George VI, Chap. 44 (Canada) This replaced the Employment and Social Insurance Act, 25-26 George V Chap. 38 (Canada)
13. R.S.O. 1950, Chap. 430.

Assessment Act in 1904[1] by which the personal property tax was dropped in favour of a tax on the assessed value of business premises. According to this change in the act, business property in a community was to be classified by industrial type classes. The local government then levied taxes at the general rates on a percentage of the assessed values. These percentages differed for each industrial classification. For example, distilleries pay taxes based upon 150 per cent of the assessed value of their premises while manufacturing concerns have their taxes based on 60 per cent of their assessed value.

For the record it should be stated that certain of the larger municipalities had instituted personal income taxes prior to 1936. But these were repealed in that year.

Today, the property and business taxes[2] remain the chief sources of municipal revenues. These are augmented by revenues from provincial government grants, public utilities, poll taxes, and such licences as may be levied. In some localities, business licences are imposed but these are of little interest in this study.

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At the outset of the twentieth century the taxation policies of the federal and provincial governments followed the same

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1. 4 Edward VII, Chap. 23, (Ont.)
2. R.S.O. 1950, Chap. 24.

pattern as at the close of the previous one. The Province and the country were still rapidly expanding. And the Provincial government took an active part in the development of Ontario's resources. All governments were loathe to move into the field of direct taxation but the need for new sources of revenue was forcing the Province's hand.

The First World War did much to change federal tax policies. The depression years so affected all government's resources that further taxes were instituted paving the way for our present tax systems. The understanding of political science and the study of economics have progressed rapidly in the past fifty years. And these have affected government policy almost as much as current events. The use of tax legislation as an added lever to effect other government policies came to be accepted by the politicians and the people.

The income and sales taxes are examples where tax exemptions are used to encourage forestry as well as other forms of enterprise. This is particularly so when tax regulations are interpreted generously. For example costs of research and of reforestation are deductible from taxable income, and equipment used in logging is exempt from the sales tax. These conditions did not come about at the initial passing of these acts but have been achieved over the years. For it is the belief of government that a healthy industry will be more amenable to accepting

direction and to carrying out activities in forest management or any other policy than an industry over-burdened by taxes.

The fire protection taxes under the Province's Crown Timber Act and the Railway Fire Charge Act are examples of taxation based on the benefits principle. By means of these payments the companies leasing Crown timberlands support the Province's protection services.

These points indicate that the federal and provincial governments are generally aware that their tax policies may materially support as well as damage their forest and other policies. This matter is discussed in further detail in Chapters III and VI.

Chapter III

TAXES AND OTHER GOVERNMENT CHARGES IN THEORY AND IN PRACTICE

Chapter II shows that in the Canadian tax systems today many taxes and charges have their impact on industry within the Province of Ontario. It is now desirable to study the impact, incidence, and effect of the major taxes, particularly as they affect the forest industries.[1] The less important levies receive only brief treatment. In addition, stumpage charges and their place in government revenues must be analysed.[2]

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1. In Appendix I to this Chapter, p. 98 below, definitions are given for the terms impact, incidence, shifting, effects, and stumpage. Appendix II, p. 103 below, contains a theoretical analysis of the effects on business enterprise, of the corporate net income taxes. Appendix III, p. 113 below, contains an outline of the survey of business executive opinion in the forest industries conducted as background for this thesis.

2. Some people may question the inclusion of stumpage in this review for it is the Provincial authorities' claim, supported by court judgment, that this is not a tax but a price charged for the forest products sold by the government (See the following court judgment: In Re Hardy, 62 Ontario Law Report (1928) pp. 367-370, and 63 O. L. R. (1928-29) pp. 246-247. Also in Re Abernethy-Longhead Logging Company (1928) 1 Western Weekly Reports, p. 544). The author grants this point readily. However, stumpage does go to swell the Province's Consolidated Revenue Fund along with taxes and other revenues. Many men in industry liken stumpage to a tax. Certainly one alternative to it is some sort of tax. There is a rigidity in stumpage which is not usually found in prices. Furthermore, some elements in stumpage are adjusted as arbitrarily as any tax. These points are discussed more fully in the section dealing with stumpage, p. 77.

Corporate Net Income Taxes

Corpration net income taxes have received much thought and discussion by economists, tax theorists, industrialists, and the man in the street. Economic textbooks and journals, newspapers, and pamphlets carry many references and articles on the impact, shifting, incidence and effects of these taxes. As no attempt can be made here to go deeply into the theories of these taxes, this section will only touch on some of the main points.

The Taxes' Incidence

The federal income tax act, as of 1952, Abbott (3), levies a 50 per cent tax upon the net taxable income of all corporations. There is a rebate up to 5 per cent where similar taxes are imposed by a province. While the tax's impact is in this way upon the shareholders of the corporation, there is considerable discussion whether or not the tax is shifted to some degree - forward through price adjustments, or backwards through reductions in payments to factors of production.

The traditional theories of incidence approach the problem of forward shifting in two ways. In the first, it is assumed that the corporation operates to maximize the return on its capital investment and that the tax rate remains below 100 per cent. Under these assumptions the net profit after taxes remains at the

maximum that could be achieved[1] whether or not the firm operates under perfect competition or as a monopoly. If a higher price for the company's products could have ensured a higher profit after taxation, then it would have yielded a higher one before the tax was imposed. For this reason a higher price after the tax levy is inconsistent with our assumption of maximizing action and the tax is borne by the shareholder, not the consumers. In the second approach, it is assumed that the corporation operates in a purely competitive economy and that the price of the product of the marginal firm is the ruling price. This marginal producer just breaks even and makes no profit. If the business lost money it would stop producing. Therefore, if there is no profit made by the marginal producer, he pays no income tax. It cannot then enter into his pricing policies. The price after the tax has been levied (or increased) remains the same as it was before. The shareholders of the businesses making a taxable profit bear the tax. This approach is valid provided the marginal producers account for an appreciable part of the supply or can expand output appreciably.

These are rather elementary and superficial considerations which make little allowance for the complexities of modern business. In 1928, the National Industrial Conference Board published

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1. This point holds for true economic profits but does not, necessarily, for the profit found by accounting methods.

the results of its detailed study of the American federal corporate income tax, N.I.C.B. ((63) Chaps. 1 and 6). In outlining their study, the Board stated that the incidence of the tax depended upon the nature of the tax, the economic conditions affecting the chances of shifting, and the general probability that business men would take advantage of favourable conditions for shifting. These factors mean that in deciding whether or not shifting occurs, any survey must study the tax's characteristics, its scope, its basis, its rates, and the conditions under which each business is carried on. To conduct such a survey, one requires a clear understanding of the degree of competition existing in an industry and the form it takes. For competition is one of the most important limitations to tax shifting. The time element is also of significance for market-period incidence may differ greatly from short-run or long-run incidence. Where a tax is general in its coverage, a survey of this scope must study the very fabric of one industry and all industries. And it must study the markets in which the industry purchases its supplies and arranges its financing. Such a survey is both intensive and comprehensive.

The National Industrial Conference Board reached certain conclusions concerning the American tax, conclusions generally applicable to a period of relative prosperity when business life was recovering from the recession of 1922. They found that in different industries the bulk of sales were usually made at a low

profit, at cost, or at a loss. Selling prices closely approximated costs of production and the bulk of the sales at these prices set the prevailing prices in fully competitive industries.[1] Therefore, the income tax would not greatly affect prices. The Board concluded that the shareholders usually carried the burden of the tax. The opinions of business executives supported this point of view.

Can the same conclusions be expected under conditions of considerable inflation and heavier tax rates? In 1950, Professor H. M. Groves reported to the National Tax Association on a study of the present American tax, Groves ((40) pp. 54-73). His committee concluded that the tax's short-run incidence is usually upon a company's shareholders. The problem of long-run incidence merged with the question of the economic effects of the tax. By the following deduction, they inferred that insofar as a tax is not shifted in the short-run it will mean a lower return on capital. As the tax is general, shifting of capital from one industry to another will not usually occur in the long-run. But new capital formation may decline. This will depend on the sensitivity of real investment to people's expectations of profit. (And here the effects of the personal income tax are important.) If a lower rate of capital formation does occur, employment may decline. But

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1. This approximates Alfred Marshall's concept of the "representative firm". Marshall, A. Principles of Economics, 8th ed. pp. 264-265.

at this point, in the long-run, steps will be taken to counteract this fall. Such action generally means a move of money and resources into consumption and public capital formation. This move may mean less private capital creation. If more resources are used in consumption, then the people's real income may be less than if there had been greater capital formation. From this reasoning we may conclude that the long-run incidence is uncertain and deductions concerning it will depend upon the assumptions made about different elements in the economy. It is clear that the short-run incidence has significance in equity considerations while long-run incidence has importance with respect to income levels.

In his article, "The Corporate Income Tax and the Price Level" Richard Goode, (37), agreed that the traditional theories of incidence were adequate in the short-run. He further pointed out that a firm will generally continue to expand until its marginal revenues equal its marginal costs of production. At this point net profits are at a maximum for up till now each successive unit of output added something to net revenues though it was a diminishing amount. As the tax falls on net profits and not on costs and as long as the tax rate is less than 100 per cent, it will pay the firm to produce up to this point where marginal revenue equals marginal cost.[1] Here, the last unit of production

1. Costs of production in this case include fixed and variable costs. If costs of production included only variable costs, this conclusion would be qualified.

adds nothing to the net revenue and nothing to taxes. If demand conditions remain unaltered, market prices should not change. The tax's incidence is on the shareholders. This conclusion depends entirely on the validity of the marginal analysis and the assumptions used.

Goode stated further that in the long-run, costs attributed to interest on equity capital, and to rent on owned scarce factors of production, and the rewards for uninsurable risk are of economic significance. As these costs are not deductible from taxable income, they are taxed. One might expect for this reason that production is curtailed somewhat by the tax. Prices are thereby increased and the tax is shifted to some degree.

In 1949, J.F. Weston, (86), commented upon Goode's view of long-run incidence. He clarifies the point that net taxable income is an "accounting net income" - one established according to accounting principles. Such a net income will not include Goode's imputed costs because they are non-contractual. Weston suggests that taxation of these costs could be avoided if they were made contractual and therefore deductible from net income.

From the viewpoint of the forest industries these non-contractual costs and rewards suggested by Goode are of great significance. It is difficult to see how they can be made contractual under present conditions.

Carl Shoup, (78), has argued that business is reluctant to change prices unless forced to do so. Therefore, unless the income tax is of considerable size or changes in its rates are quite large, it is doubtful if prices will be altered. Thus the incidence remains on the shareholders.

In a paper A.G. Buehler, (11), concludes that when tax rates are high, income taxes are probably shifted in large part to consumers or wage-earners. He agrees with Goode's view of the tax falling in the long-run on the cost attributed to interest earned on a business's capital. However, Buehler qualifies his remarks by pointing out that large concerns are frequently in a better position to control prices (and shift taxes) than are small firms. These latter generally operate under more competitive conditions. Therefore it is probable that such businesses are less successful in shifting the tax. This point may be of some importance if the tax is held to be capitalized with respect to the prices of shares.[1]

Although the conclusions reached above have received support, the results of the poll of executive opinion in the sawmill and pulp and paper industries conducted in connection with this thesis, generally support the view that corporation net income

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1. That is, prospective buyers knowing a concern is not likely to shift its income taxes, pay less for such a corporation's stock than if it could successfully pass on the tax. This difference is presumed to be the capital value of future taxes.

taxes are shifted whenever possible. D.C. Abott, ((2) p. 3132) Minister of Finance, has said,

> "I think it should be realized that under existing conditions, taxes imposed on business concerns probably go into the price of goods and with demands as they now are, I must say that my own view is that an excessively high corporation tax could provide an impetus to inflation".

Certainly income taxes are usually viewed as a cost to be recovered through adequate pricing. As far as is possible, forward shifting probably occurs in the forest industries, although only in the long-run due to the slow turn-over of inventories. Insofar as pricing will not recoup these taxes, backward shifting is seen in the reluctance of forest industries to invest in forest management requirements and in some instances in plant expansion. The extra costs paid by the forest industries for forest management are probably among the most easily escaped by these industries. The poll mentioned above could not be a detailed study of impact, shifting, and incidence of corporate taxes. A closer study of the pricing arrangements peculiar to the pulp and paper industry may indicate a modification of these opinions. For here a few very large concerns establish the price of newsprint in a market often dominated by extremely well organized purchasing arrangements, Coughlin (30) and Guthrie ((42) pp. 194-218). Furthermore, some pulp and paper companies have virtual monopolies of the domestic markets for their special products.[1] On

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1. From the poll of executive opinion in the forest industries.

the other hand, the lumber industry is characterized by its keen competition. Yet detailed study of the location of timber lands vis-à-vis sawmills, and transportation facilities may indicate regional conditions favouring tax shifting in an otherwise very competitive industry.

The Taxes' Effects

There exists no measure of all the effects of corporate income taxes. The economy is dynamic and the consequences of the tax interweave with those of other forces. In analysing the effects of taxes, time is the most important element to consider for short-run and long-run changes may vary greatly. While these problems do preclude very precise analysis of the effects of these taxes, some broad results may be noted. It is worthwhile to ask: have the federal and Ontario corporation income taxes any effects upon the Province's forest industries? In particular, do these taxes affect forest management? Of course, the following answers are not claimed to be exhaustive; but rather, suggestive. The problems touched on here have not yet received the intensive study that they require.

General

These corporation income taxes will tend to affect the forest industries in much the same manner as they will all industry in Ontario. Almost all the annual statements of corporations contain today some comment on the depressing effects of

the present high corporate tax rates. R. M. Fowler, ((35) p. 3) president of the Canadian Pulp and Paper Association, recently expressed the views of many industrial executives when he said,

> "There is much to suggest, also, that taxes on corporations and individuals have reached, or passed, the point of no return. Further increases, and possibly present levels of taxation, are likely to defeat themselves by robbing corporations of the money to expand and individuals of the money to buy and the incentive to produce more. Certainly in this industry (pulp and paper), unless net profits can be maintained through increases in sales returns, the re-investment in new facilities will be retarded and great opportunities will be lost."

Douglas Abbott, Minister of Finance, ((1) p. 1809) has stated that the government is aware of the blunting effect of high corporate income tax rates on the goad to efficiency. Such rates invite waste.

Investment

Undoubtedly the present high levels of tax rates have had detrimental consequences on the forest industries and indirectly on forest management. The poll of executive opinion mentioned above has shown that the lumber and pulp and paper companies are reluctant to invest any more money in forest improvements than (a) is necessary for immediate extraction of forest products

or (b) can be spent as part of these essential expenditures. This attitude is held even though the companies realize that the management plans they are trying to establish, do require additional expenditures - particularly if they are to become effective now rather than in the distant future. For example: (1) An extraction road may be built to last the period of a clear-cutting operation, perhaps 5 years. Of low-cost construction, it will not be maintained. Yet it may be desirable to have built a more permanent or better grade road in order that nearby areas of timber can be better protected and cared for. (2) Growth of a certain stand of timber may be held in check because of overstocking. Partial cutting would open up the stand and improve its future yield. However as such an operation may be expensive and not a part of a regular cutting operation, it is not undertaken. Naturally income taxes do not receive all the blame for these conditions. But they are significant factors in the present forest situation.

Like industry in general, the forest industries rely heavily on undistributed profits to finance investment programs. In outlining the present heavy investment policies of the pulp and paper industry, Fowler, ((35) p. 3), stated that in 12 representative companies, 61 per cent of net profits during the years 1945-1950 were retained within the business. These funds provided 90 per cent of the companies' increase in net worth during the period.

The desirability of maintaining an adequate rate of corporate savings is apparent. Business executives like Fowler have testified to the difficulties which they face in spreading net profits out among taxes, dividends, and savings. Taxes, they claim, do not leave an amount sufficient to provide for both savings and dividends at suitable rates. How valid these claims are, is difficult to judge. Certainly the record of investments by the large forest industries during the past five or six years is impressive. One may question with what importance these industries actually rate their forest investments. There is some evidence that when forest executives speak of investments in their companies, they are thinking in terms of plant expansion and improvement. The forests themselves seem to rate rather low. One further point is difficult to assess. That is, to just what degree the present complaints against tax rates, are a natural product of the present expansionary economic situation. Would there be enough money for investment even if there were no corporate income taxes?

The Ontario and Quebec corporation income tax rates of 7 per cent naturally have some prejudicial effects on investment in these provinces. Until 1952, through agreements with the federal government, the remaining eight provinces limited their rates to 5 per cent. In his recent budget address, Finance Minister Abbott announced that with the adjustment of the federal tax

rates for 1952 and succeeding years, the 5 per cent provincial tax would be included in the federal rate. The agreeing provinces have been asked to repeal their corporate income taxes. A deduction of 5 per cent is allowed taxpayers in those provinces levying corporation income taxes; i.e. Quebec and Ontario. Yet while corporation income tax rates in the central provinces are higher than elsewhere in Canada, they seem to have been offset by other advantages of doing business in these provinces.

Tax on Logging Income

The federal government allows as a deduction from a taxpayer's taxable income, the tax paid to a province on income from mining or logging operations. It provided this deduction primarily to allow the provinces first option on income derived from these sources. This was in recognition of the provinces' rights as custodians of their natural resources under section 92, subsection 5 of the B.N.A. Act. The deduction was not provided in order to favour the forest or mining industries in any manner. In 1950, the Province of Ontario increased its tax rate from 7 to 9 per cent on such logging income in excess of $10,000. By this measure, the province captured almost all the relief any forest industry might claim under the federal allowance. The computation of "income from logging operations" by companies which convert the products of their own woods operations, raised some problems. The Province has agreed to accept the federal government's assessment of what such income should be. The com-

panies calculate their logging income according to a formula devised by the federal Department of National Revenue in co-operation with the Ontario government. These authorities consider the formula to be fair, even a little generous, although a different opinion is held by executives in some of the pulp and paper companies. As it is such a new tax, there is little evidence of any particular effects which result from it. No other province levies such a tax.

Inventories and Uninsurable Risks

Large inventories of logs, pulpwood, or seasoning lumber, characterize the forest industries. The inventory turn-over period generally exceeds 12 months; in some instances, pulpwood takes two years to reach the mill from the forest. To cover these inventories and customer credits at present high prices, the forest industries require large amounts of working capital. Furthermore, the long turn-over period may see hopes of profits dashed by serious price decreases for end products. These concerns try to meet such uninsurable risks by accumulating reserves against marketing losses. And it is in their efforts to maintain adequate working capital and reserves that the forest industries keenly feel the effects of high corporation income tax rates. It is the opinion of many in lumber and pulp and paper that the margin of profits left after taxes is too small today to meet all these requirements as well as the proper claims of shareholders. It is possible that inventory reserves

do suffer in the squeeze.

There is little doubt that prices for forest products have risen during the past few years as a result of the increasing impact of corporate taxes. Would it be wrong to suggest that the increasing necessity for government financing of low-cost housing results in large measure from high tax rates? Further problems created by this rise in prices for forest products - problems too complex to be discussed in detail here - are the improved position competitive foreign forest products gain in the Canadian markets and the less favourable position Ontario producers must accept in foreign markets.

Allocation Formulae

Formulae for allocating income for provincial tax purposes have raised some problems and caused some injustices to occur. Where a forest company's (or any other company's) head office is in Ontario and it operates establishments in another province or country, the Ontario government taxes the whole of the company's income and then to avoid inequalities, provides deductions from the amount of the tax. These deductions are based on a division of the company's income between it's Ontario and its outside establishments. When possible, income is allocated in the ratio that the company's gross sales in or gross revenues from the outside establishment bear to the corresponding total sales or total revenues for the company. The maximum tax credit allowed is

equal to a tax at the Ontario rate on the outside income. If the tax paid to the outside jurisdiction is less than this amount, the lesser sum is deducted from the Ontario tax. When this occurs as it does in Canada, the company would pay to Ontario a tax on its outside income at a rate equal to the difference in the Ontario and outside rates.[1]

If the company's income can be divided accurately between tax jurisdictions on the basis of the company's accounting records, this basis may be used in Ontario. When accounting records do not show the proper division formula methods must be used. Until Mr. Abbott, (3), recently requested the repeal of corporation income taxes in the provinces under tax agreements with the federal government, the Ontario allocation basis differed from that prescribed by the uniform acts of these provinces.

These provinces allocated income in the ratio that the gross sales and the salaries and wages of the outside establishment have to the total gross revenue, and salaries and wages of the corporation. This formula differed from the Ontario one. Therefore, it was possible that allocations could be different under the two and a corporation might be doubly taxed on a portion of its income. Since Mr. Abbot's new adjustment of the

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1. The problems created in allocating corporate income to its proper situs for tax purposes which are discussed here, will be largely obviated when the Aug. 1952 tax agreement between the Federal and Ontario governments is ratified.

federal income tax rate to include the 5 per cent rates of the agreeing provinces, Ontario provides an allowance at the previous 5 per cent rate to corporations for taxes on income earned in the agreeing provinces.[1]

Where companies having head offices outside Ontario operate establishments in Ontario, the income of these establishments is taxed. The province taxes the company's whole income and then allows a deduction equal to the Ontario tax on income derived outside the Province. In effect, only income earned in Ontario is taxed.

Quebec has similar income allocation procedures as Ontario except that it does not provide for allocation according to accounting records where this is possible.

It is apparent that any tax difficulties arising out of differences in allocation methods for income could be considerably eased if all provinces and the federal government used the same allocation formulae.

Depreciation

The majority of men in the forest industries consider as reasonable the federal and provincial regulations concerning depreciation allowances. Ottawa's adoption of the reducing

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1. 1 Elizabeth II, Chap. 13 (Ont.) Sect. 2 (15).

balance method for computing depreciation has meant some extra work for industry. Owing to the fact that many companies use a straight line method and that many use higher rates of depreciation than allowed by regulation for tax purposes, tax returns by corporations must be adjusted to bring the valuations of fixed assets appearing in company statements into line with those allowed by the government. Opinion varies on whether this is a simple operation or not. The Ontario government which used to recognize the straight line method for depreciation, has now agreed to accept reducing balance valuations based on the federal government's rates. This should simplify matters of tax returns.

Depletion

Many men in forestry believe that the deductions which the federal and provincial governments allow for forest depletion, [1] are unsatisfactory. And their complaints seem quite reasonable, particularly where timberlands or licences have been held over long periods of time. By regulation, depletion allowances that are deductible from taxable income, are based upon the initial cost of the timber. If a timber limit has been held many years,

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1. The author believes that depletion allowances for capital invested in timber lands are comparatively less important than depreciation allowances in respect of other capital costs. This is because, generally speaking, the majority of timber lands now leased from the Crown did not require payment of any lump-sum bonus for their acquisition. Furthermore, it should be noted that this discussion of depletion allowances does not concern similar allowances for company expenditures which have been capitalized. It concerns only capital costs incurred in the acquisition of timber lands.

its capital value may have appreciated considerably by the time it is logged. This appreciation in value is a capital gain accruing to the operator. However, if he logs the land, the capital gain appears as income and is taxed because the depletion allowance is based upon cost value, not present value. Yet the governments claim that their income taxes are taxes on income and not on capital gains. One must condemn any suggestion by tax officials that if an operator wishes to avoid the tax on capital gains, he should sell his timber en block on the stump or sell the limit outright. Such action could seriously disrupt or nullify any long-term forest management plans which the operator may be trying to carry out.

Tax authorities may claim that to change the method of calculating forest depletion in order to correct this situation, would be unfair to all other industries. This rigid attitude ignores the preferential treatment already accorded the mining companies. It ignores the need of flexible regulations which can be adjusted to meet extraordinary situations. Such a situation exists in the present period of transition of the forests from liquidation to sustained yield management. These problems and suggestions for improvement in depletion regulations are dealt with in Chapter VI. A few highlights of the present federal and provincial regulations as they affect the mines conclude these remarks on depletion.

Mining Regulations

Federal Regulations. Operators of oil or gas wells, base and precious metal mines, and industrial mineral (non-bedded deposits) mines when computing their income, may deduct for depletion 33 1/3 per cent of the profits for the year, which may reasonably be attributed to the production of the well or mine.[1] This means that the value of the product upon which depletion is based, is the current value and not the initial cost value. It may be argued that it would be difficult to estimate accurately the volume of oil or minerals in a well or mine when it is first proven. And therefore it is impossible to prorate the costs of acquisition over this volume in order to establish a depletion basis. Yet the use of the present value of such products as represented in the company's income, rather than the value when operations commenced, seems a significant departure from general practice.

In addition, operators of coal mines and of the mines mentioned above, may claim an allowance equal to 25 per cent of the costs attributable to prospecting, exploration, and development of the mine before it comes into production in reasonable quantities.[2] There are certain qualifications to

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1. The Canada Gazette, Part II, Statutory Orders and Regulations, Vol. 84, No. S-53, Dec. 28, 1949. The Income Tax Regulations, P. C. 6471 as amended, Part 12. Cited hereafter as The Income Tax Regulations.

2. Ibid.

this allowance which must be satisfied.

Another special allowance may be claimed by operators of the metalliferous and industrial mineral mines. If the mine came into production during the years 1946 to 1954 inclusive, income from operation of the mine is exempt from taxation for three years from the date production began.[1]

Furthermore the shareholders in mining corporations may claim deductions from their personal income in respect of depletion in the mine or wells from which such income derives. Depending upon what proportion the company's income from mining is of total income, this deduction varies from 10 to 20 per cent of the dividends of the corporation.[2] In the event of a distribution of such a corporation's undistributed profits, an individual may claim a deduction of 20 per cent of such dividend value.

Provincial Regulations. The Province of Ontario taxes income of mining companies under the Mining Tax Act,[3] not the Corporations Tax Act. When computing taxable income, oil and gas companies may deduct the year's expenses for exploring and drilling from income for that year. Mining companies may similarly deduct an amount equal to the aggregate of their

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1. The Income Tax Act, op.cit., section 74.
2. The Income Tax Regulations, op cit. Part 13.
3. Revised Statutes of Ontario, 1950. Chapter 237.

prospecting and exploration expenses or such smaller amount as the Provincial Treasurer will allow. All expenditures on development of a mine until it is producing or is abandoned may be deducted when the mine comes into production or is abandoned.

Depletion allowances may be granted to operators of oil and gas wells. These are at rates agreed upon by the Treasurer. However, operators of mines may claim no depletion allowances. Mines which came into production during the years 1944 to 1952 inclusive were permitted for the three years after they commenced production, to deduct from the tax payable on income from the mine, an amount equal to 50 per cent of the tax. The author has not been able to ascertain whether the Province will extend this provision to include the years 1953 and 1954 as the federal government did with its somewhat similar tax exemption.

Mining companies receive further favourable tax treatment. Mining income below $10,000 is exempt from taxation. The tax rates are progressive on income over this amount: from $10,000 to $1,000,000, 6 per cent; from $1,000,000 to $5,000,000, 8 per cent; and over $5,000,000, 9 per cent. These compare with the tax rates of 7 per cent on the first $10,000 of logging income and 9 per cent on such income over $10,000; and 7 per cent on income from other sources which are paid by the forest industries.

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Clearly the federal regulations have been designed to put the mining industry in an attractive position in the investment market. A great deal of the risk in this speculative field has been removed by the federal government's actions. It is understandable with what envious expressions men in the speculative lumber industry view such tax concessions. With a more detailed study of the net results of the special provincial legislation with its deductions and special tax rates for mining companies, it is difficult to say whether or not they have received more favourable tax treatment than the forest industries.

Favourable Effects

Many adverse effects of the federal and provincial corporation income taxes have been brought out in this section. On balance one should note that if tax rates were held constant over time, tax returns would follow fluctuations in the business economy; lesstaxes would be collected as profits fall and more when profits rise. This would tend to dampen such fluctuations and be a stabilizing influence in the economy. This influence is increased still further by adjustments in the tax rates which follow swings in the business cycle.

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The above analysis of the effects of the corporation income tax on the forest industries applies to a post-war period with a decidedly inflationary trend. Furthermore, the analysis gives

little or no attention to the purpose of the prevailing high federal tax rates or the results of present heavy government expenditures. The inconveniences and increased costs of carrying on business under these conditions may be but a small price to pay for military preparedness. The forests and forest industries have an integral part to play in this important program. Foresters and people sincerely interested in the state of the country's forests may with reason ask whether our governments are directing enough attention to ensuring that the forests will be able to continue playing their vital role in the years ahead. For keeping the forests in a properly managed condition is one phase of preparedness, one which cannot be improved quickly in the event of war. Therefore, fiscal practices should be adopted which will meet the requirements of forestry as well as the over-all financial policy.

Other Taxes

It is difficult to assess the importance to the forest industries of taxes other than those paid on corporation income. These companies, like others in the Province, contribute to the Provincial and municipal treasuries through a multiplicity of taxes, licenses, fees, and duties. The significance of any one of these in the costs of a particular company may depend upon the company's size, its capital structure, method of conducting business, purchases for the given year, the rate of tax, the tax base, and so on. (Naturally it was not possible, nor desirable for the

author to go into all these factors as they might pertain to the forest industries.) The general theory concerning the usual impact and incidence of most of these taxes is well defined in fiscal literature. As many of these are fixed costs rather than variable, their effects upon the forest industries can be fairly well surmised - particularly as they may concern the practice of sound forest management. Therefore the taxes listed below will receive only summary treatment regarding impact, incidence, and effects upon the forest industries in Ontario.

Possibly one or more of these taxes may have an unfortunate cumulative effect on some portion of either the sawmill or the pulp and paper industry that is located in a certain locality. Detailed analysis of these taxes should be deferred until such special problems arise, at which time all relevant factors may be given thorough study.

The taxes to be considered in this section may be grouped as follows:

(1) Provincial corporation taxes.

  (a) Annual tax of $50. for each place of business.

  (b) Annual tax of 1/20 of 1 per cent of the paid-up capital value of a corporation.

(2) Municipal and land taxes.

  (a) Municipal business tax for manufacturing concerns - at a local rate on a business assessment

equal to 60 per cent of the assessed value of the real property occupied by the business.[1]

(b) Municipal property tax on lands owned by the manufacturing concern - at local rates on the assessed value of the land.

(c) Provincial land tax on lands owned or held under a lease or licence by a corporation and situated in an unorganized township. A company pays no tax on interests in lands granted by licence, lease, or agreement under the Crown Timber Act. The tax rate is 1 per cent of the assessed value of the land. Assessments are nominally set at $4.00 per acre.

(3) Consumption taxes.

(a) Sales and other federal excise taxes at current rates. Where applicable companies pay these taxes on goods they purchase. They pay no sales tax on mill machinery or equipment used in logging operations.

(b) Gasoline tax - a provincial tax equal to 11 cents per gallon of gasoline purchased.

(4) Licences and fees.

(a) Incorporation fees of federal or provincial

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1. Revised Statutes of Ontario, 1950, Chap. 24, S. 6 (1)e.

companies - fees vary depending on form of capitalization and amount of capital stock. The minimum fee is usually $100.00. Small additional fees are charged for filing required documents, supplementary letters patent, etc.

(b) Provincial licensing of saw mills and pulp and paper mills. Annual licence fees vary: maximum charges are $10.00 for sawmills with over 50,000 board feet daily capacity, and $50.00 for pulp and paper mills with over 50 tons daily capacity.

(c) Motor and commercial vehicle licences. An annual provincial charge, the amount of which depends upon the class of the vehicle.

(d) Provincial land transfer tax - an amount equal to 1/5 of 1 per cent of the purchase price or consideration paid for land. Minimum tax is $2.00 for patented lands or leases from the Crown.

(5) Miscellaneous taxes or charges.

(a) Succession duties - these are significant only where a company is a private or family-held corporation.

(b) Annual charges under the Crown Timber Act.

(i) Ground rent - at rates for timber licence holders of $5.00 per square mile and for pulpwood agreement holders at the same

rate applied to 1/10 of the concession area.

(ii) Fire protection charge - at a rate of $12.80 per square mile; payable on all lands held by licence, lease, or agreement under the Act.

(c) Railway fire charge - annual fire protection charge of $12.80 per square mile paid by all owners or tenants of any railway lands.

Except for the succession duties (which are discussed separately below) these taxes and charges fall directly upon the companies. All or almost all their incidence will probably be upon the final consumer of the large number of forest products. For these taxes and charges are considered as indirect costs of doing business and companies make every attempt to recover them through their price and sales policies. One further important point; all these taxes except succession duties are deductible when computing taxable income under the federal and provincial income tax acts.

The degree of shifting which will occur, will naturally be affected by many of the same variables that were discussed in the section on the incidence of corporation income taxes. These include general business conditions, competitive prices of similar or substitute products, the degree of local monopoly exercised, the size of the tax, the flexibility of price schedules, and so on. Furthermore, the fact that municipal and provincial taxes are levied on corporations within these limited jurisdictions, may hinder the

process of shifting. For example, if corporation taxes paid by Ontario companies are much above those paid by other companies, the Ontario concerns may have to absorb the tax differential under which they operate. An Ontario firm might possibly pass on the whole tax in Ontario markets but only part of it in outside markets. However, it does seem safe to conclude that the forest industries are quite successful in passing on these taxes. There is little complaint against them. While this may be the condition today, it does not mean that these taxes could be increased without stress upon industry. They represent a fairly rigid element in company costs. Nor does it mean that the taxes are without fault in their structure, basis or application.

While no attempt will be made to discuss each tax in detail, some comment at this point seems desirable in order to suggest possible avenues for future study. These following remarks are brief.

Provincial Corporation Taxes

The provincial place of business tax has little to recommend it save simplicity of operation. It is ineffective as a producer of revenue,[1] Ontario (70), and has become nothing more than a nuisance tax. It should be repealed.

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1. Of a total tax revenue of $177,800,000 raised by Ontario in the year ending March 31, 1951, only about $900,000 or 0.5 per cent came from the place of business tax.

The tax on paid-up capital is much more successful as a revenue producer and yet is rather insignificant whem compared to the corporation income tax.[1] While simple to administer, the tax takes no account of a corporation's ability to pay the tax. What revenue it produces generally will be stable. Because the tax rate is low, it is doubtful if the tax's faults cause corporations any hardship. We may then expect it to remain upon the statute books for some time yet.[2]

Municipal and Land Taxes

The municipal business and property assessments are both taxes of long standing in the Province. They form the backbone of munipal finance. Property values have been established with the expectancy that these taxes will persist in the local tax systems. Therefore there seems little use inveigling against the taxes' regressive nature, against the heavy fixed burden they place upon business, and the narrowness of the base from which to draw the bulk of local finances. For undoubtedly the taxes are very suitable for local administration and are comparatively simple to operate.

If there is little hope of abolition of these municipal taxes, there are great possibilities for their improvement. Poor

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1. Ibid. Of total tax revenues for the year ending March 31, 1951, Ontario raised $2,100,000 from the paid-up capital tax and $65,900,000 from the corporation income tax.
2. Both the place of business tax and the tax on paid-up Capital are to be suspended under the Aug. 1952 Federal-Ontario tax agreement.

assessment practices can be remedied and local tax systems can be diversified. Equalization of assessments within the larger municipal jurisdictions will remove many inequities. It may be possible through reforms in assessment procedures eventually to swing local taxation over to a basis which takes account of a taxpayer's ability to pay his taxes. But the process will be slow.

The Provincial land tax substitutes in unorganized townships for the property tax in organized regions. It is a property tax closely akin to the municipal levy. Because few corporations own any forest lands in fee simple or lease other than Crown forested lands in townships where the tax applies, it has little significance. Furthermore, the Province has placed only a nominal and uniform assessment upon forest lands. The tax yields the province only a few hundred thousand dollars annually, Ontario ((64) p. 4),

Yet it should be pointed out that the present form of the tax is bad - especially from the viewpoint of forest owners. The valuation of forest property is based upon its sale value. Forest property or land is deemed to include the standing timber upon it. Thus assessments could increase as an immature stand grows older and more valuable. This factor could lead to an area being logged before the timber on it had reached its best value. A remedy to this situation would be to base assessments

upon the land's capacity to produce timber and, thereby, income.

Consumpsion Taxes

The federal sales tax is a manufacturer's excise tax, normally levied on goods made in Canada and on the duty paid value of imported goods. The manufacturer collects the tax on domestic goods. Along with certain articles, equipment used in logging and machinery used in manufacturing processes bear no tax although spare parts do.[1] Therefore the forest industries would pay the tax only on such items as would not fall into the above categories.

One feature of the sales tax can be troublesome. As the tax on a manufacturer's own products is collected when they leave the factory, he must finance the tax payment until he can collect it from his customers. If certain of these customers fail to pay, the producer is out the tax money. His only consolation (in this regard) is that his reserves for bad debts are free of income tax! As building materials are exempt from sales taxes, this problem is not of great importance to the lumber industry.

Because this study regards taxes from the viewpoint of the forest business man, no account will be taken of other bad features in the sales tax which strike the individual hardest.

The forest companies pay certain other excise taxes such

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1. II George VI, Chap. 60, as amended (Canada) Schedule III. For reference see Canadian Tax Reporter, Vol. IA. pp. 9351-9353. Toronto, C.C.H. Canadian Ltd., 1951.

as the 15 per cent tax on automobiles.

Insofar as all the excise taxes paid by industry appear as part of a firm's costs of production, pyramiding[1] of these taxes does occur. As the sales tax is levied at the production level rather than the retail level, there seems no way of avoiding such pyramiding without so complicating the tax structure that it becomes unwieldy.

While sales and excise taxes may possess many bad features in theory and in practice, there seems little likelihood that they will be dropped from our tax system. They bring diversity and stability into the system at the expense of making it somewhat regressive in its effects. For the fiscal year 1952-53, they are expected to yield to the federal government some 20 per cent of its tax revenues, Abbott, ((3) budget speech).

The Provincial gasoline tax is a retail sales tax based in theory upon the benefit principle. People who use the highways help to pay for them by way of the tax. The tax is lucrative and easy to collect. In the year 1950-51, it yielded over 36 per cent of Ontario's tax revenue, Ontario (70). There is little doubt that the tax will remain part of the Province's tax system for

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1. Pyramiding of a tax occurs if the tax appears in the price of any of manufactuerer A's goods which are used by manufacturer B. B's goods are also taxed. Therefore part of the tax on B's goods may be said to fall on the tax levied on A's goods. And so on. Another result of levying a tax at the manufacturer's level which is called pyramiding occurs when the retailer places his mark-up on the wholesaler's price which includes the wholesaler's mark-up on the manufacturer's price plus the sales tax. Thus the final purchaser pays a sum greater than the tax as a result of the mark-ups on the amount of the tax.

many years. Forest industries may claim a refund on the tax they pay on gasoline used by unlicensed vehicles in logging operation.

Licences and Fees

The licences and fees listed in group four are of negligible importance to the forest industries. The licensing systems of which they are a part do provide the Province with means of controlling malpractices in the pertinent fields. The fees help to offset the costs of regulation.

Miscellaneous Taxes and Charges

Succession duties (both federal and provincial) are taxes based on the value of a man's estate at his death. As such it is one form by which capital gains are taxed in Canada. If these duties are of any significance to the forest industries, they are so only to firms which are managed as single proprietorships, partnerships, or private (family-or closely-held) corporations. If on the death of the owner, partner, or major shareholder of such a business, the succession duties on his estate cannot be met out of liquid assets or income from the estate, the company or part of it may have to be sold. In theory, such an event might upset a sound program for management of a company's forest assets. In all likelihood such circumstances will not occur. Firms of this class are usually small, and few small forest companies have enough forests to

make up an adequate management unit. The initial exemption from tax of $50,000 of the estate's value, reduces still further the chances of any misfortune as postulated. However, certain features of the British estate duty having a bearing on this matter might well be incorporated in the federal and provincial acts. These are described in Chapter IV[1] and discussed further in Chapter VI.

As mentioned in Chapter II, the Province's fire protection taxes under the Crown Timber Act and the Railway Fire Charge Act are further examples of taxes levied to pay for certain benefits. Forest fire protection is a costly undertaking which is shared by the forest industries and the government. By paying this tax the companies are doubtless kept aware of the costs of the protection service.

While the companies may seem to benefit most by the service, the people of Ontario also have a large interest in their forests which must be guarded. It has been said that the actual costs of fire protection are not more than three quarters defrayed by the protection tax revenues. Because logging operations create hazardous fire conditions in the forests, people claim the companies should pay still more of the costs of protection. Tax rates were doubled in 1951. Granting the high hazard that logging slash creates, it is still true that the largest

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1. See pp. 145 and 187 below.

proportion of forest fires in the Province result from smokers and campers[1] Ontario ((69) p. 48); that is, travellers in the woods. The companies cannot be responsible for all these people nor for many of the others who cause fires. For on an average over 75 per cent of forest fires in Ontario are the result of human action. These are strong points in the forest operators' arguments that they are already paying their share of protection costs and that tax rates should not be raised further. At their present level, these taxes seem to be no great burden on the companies; (the survey of executive opinion mentioned previously indicated no dissatisfaction with present rates.).

In giving consideration to the annual ground rents paid by licence and agreement holders under the Crown Timber Act, it is interesting to note the purpose for which these rents were initially charged. Evidence given before a Select Committee of the Legislature in 1849, Report of 1899 ((67) p. 68), showed that some lumbermen were monopolizing timber limits along the Ottawa River. The Committee in its second report suggested that an annual ground rent be charged for each square mile of a limit and that this rent be doubled for each year in which any

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1. A weighted average for the 7 years 1943-1949 show 45.4 per cent of fires were caused by smokers and campers; 32.1 per cent by other human agents; and 22.5 per cent by lightning and unknown causes.

operator failed to work his limit. In 1851, this suggestion was incorporated in the c rown timber regulation, Report of 1899, ((67) p. 79 and 82). From these regulations, one may interpret ground rent to have been charged to prevent any monopoly of timber limits and as a penalty for an operator failing to work his limits.

The situation today is quite different. Ground rent appears to serve nodther purpose than to raise additional provincial revenues from the forest resource. It captures a portion of the economic rent for the forests accruing to the government. As rents are only nominal, the yield hardly amounts to 2 per cent of the annual timber revenues, [1] Ontario ((69) p. 10).

As ground rents have become quite insignificant, they may be adjudged as being little more than nuisance charges today. They bear no relation whatever to an actual rental value for forest land. In fact, under present circumstances, it is very doubtful if such a rental value could be calculated. One may well ask for what reason are such rentals retained?

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1. Ground rents for the fiscal year ending March 31, 1950, totalled $112,000 - 1.66 per cent of timber revenues.

Stumpage[1]

Stumpage in the form of Crown dues dates in Ontario from the year 1826.[2] In the light of later developments it is interesting to speculate whether the government of that day viewed stumpage as a tax or as a price. The use of the terms "such rates and duties" and "exaction of any rate hereby imposed" would seem to indicate that the authorities may well have considered stumpage as a tax. The licensing systen then inaugurated, was introduced as a reform of the old monopoly charter or licence system. Under this charter, system, the imperial government granted certain English merchants rights to cut in Crown forests in order to supply the Royal Navy with spars and timbers. These merchants designated certain Canadians as agents who undertook the logging operations. This system was grossly misused and corrupt. The new licensing method provided a means whereby any individual could earn his living in the lumber industry,[3] Report of 1899 ((67) p. 49).

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1. For an explanatory note on the composition of stumpage, see Appendix I, p. 98, below.
2. See Chapter II, p. 16, above.
3. Extracts from the pertinent paragraphs in the proclamation of 1826 are as follows:

> "We have thought fit to order and direct that .... it shall and may be lawful for all our subjects inhabiting our Provinces of Upper and Lower Canada, freely to enter into our woods and forests in such parts of our said Province of Upper Canada ... and to cut and carry away such oak and pine timber as may be fit for the purpose of exportation.
>
> "Provided always ... that in consideration of the authorities and permission hereby given, the several rates and duties hereinafter specified shall be paid to Us .... which duties are to be paid in lawful money of our said Province of Upper Canada, and to be levied and received by such persons as We shall appoint ...
>
> "Provided always,...., that all persons properly authorized by or under Our license granted in manner heretofore used to cut timber in Our Said Province shall be permitted to carry away and export same ... without the exaction of any rate hereby imposed ...."

It is possible then that stumpage could have been the device by which the Provincial government obtained for itself revenues similar to those the imperial government exacted from the British merchants.

Whether or not stumpage was a tax at its inception, it soon came to be viewed by the government as the price asked for its wood products. Extracts of evidence taken in 1838 before the Assistant Commissioners for Crown Lands and Immigration indicate that both Commissioners and lumbermen looked upon stumpage as the price paid for the timber on the licensed areas, Report of 1899 ((67) pp. 55 and 56). And as a price, it probably assisted in the allocation or 'rationing' of the timber limits. At a later date, provincial revenues from the sale of timber resources were in the minds of the men who framed subsection 5, section 92 of the B.N.A. Act.[1] And in more recent times, the courts have adjudged stumpage collected under the Crown Timber Act to be the price that the government charges for the sale of its forest products.[2] It is this principle by which the Province today sets its stumpage rates.

In theoretical terms, stumpage is largely the economic rent accruing to the Province for the products of its forest lands;

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1. See Chapter II, p. 24 above.

2. In re Hardy, footnote p. 39 above.

the return on resources for which Ontario incurred only the costs of protection and administration. The existing forests cost nothing to grow. Presumably the amount of rent coming to the Province would be settled by the forces of supply and demand meeting in the market for forest products. If the government sets its price below the normal market price, some of the economic rent goes to the purchaser of the wood. To find what should be the value of this rent properly owing to the Province, it is necessary to know the costs of production and management of the forests and to deduct these from the market prices of primary wood products.

One difficulty in any discussion of stumpage today arises from the fact that management of the forests is in the process of change; from a liquidation policy to one of management for an optimum sustained yield of forest products. If this transition could be effected overnight, few problems would arise in the treatment of stumpage. Of the difficulty which does arise, this much may be said: methods of evaluating stumpage which applied under a liquidation policy are fast becoming obsolete; new methods applicable to a sustained yield program cannot be expected at all times to prove adaptable to existing conditions. However, it is possible that an analysis of methods suitable to these two extreme situations may reveal points useful in solving present-day problems.

Stumpage under a Liquidation Forest Policy

As stumpage today still comprises the same elements[1] that it did before sustained yield forestry became Ontario's goal, the analysis of existing stumpage valuation procedures will be applicable to the policy under review.

When stumpage is set at auction by tender, two elements may be expected to reflect the present conditions of the market - the Crown evaluation and the purchaser's bid bonus. The third element, Crown dues, tends to move only slowly in response to broad changes in the e conomy. Because these dues are set by regulation, the authorities prefer to keep them fairly stable. It is this feature of setting Crown dues arbitrarily by regulation which likens stumpage to a tax. Areas involved in timber auctions are usually small as also may be the companies or operators who are bidding. Monopoly bargaining conditions prevail; conditions which tend towards those of a discriminating monopoly.[2]

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1. See Appendix I, p. 99 for an outline describing these elements.
2. Discriminating monopoly - one in which the monopolist practises price discrimination between different buyers. See Pigou, A. C., The Economics of Welfare, 4th ed. p. 275. In the situation described here, the Minister of Lands and Forests may accept the highest tender offered for the limit at auction. However, if there is justifiable reason why the highest tender should not be accepted, the Minister may refuse the tender. Such a reason might be the obvious inability of the bidder to carry out the terms of the licence contract because he is not equipped to do so. From the forester's viewpoint, discrimination in this manner may be justified.

Where stumpage is set by negotiation only one element may be said to reflect present market conditions - the purchaser's bonus price. As this method of determining stumpage has been used where large tracts of timber are involved and where only one company is concerned, the bargaining approaches that found under conditions of bilateral monopoly.[1] Because of this, the final stumpage price is indeterminate from the standpoint of economic analysis. Such analysis can only show within what limits the result will lie. The price will finally be determined by the relative bargaining strengths of the government and the negotiating company.

When considering stumpage under the early liquidation forest policy, it should be realized that the government was not conducting forestry as a business - unless it was the business of getting rid of its assets. By selling its capital, the Province was out to raise a revenue which would be considerably greater than any costs that administration or protection entailed. Crown dues were set low because timber was so plentiful. By using the bid bonus and the Crown evaluation, the government could adjust its price to market conditions for wood products generally or for a

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1. Bilateral monopoly - one in which a degree of non-transferability of commodity units on the one hand or of demand units on the other, exists sufficient to make discrimination profitable between the monopolist seller and each buyer. See Pigou, A. C. Ibid, p. 278. Essentially the monopolist seller is dealing with a monopolist or near-monopolist buyer (monopsonist).

certain locality. Thereby it tried to ensure that as much as possible of the economic rent accruing to the forest products would find its way into the coffers of the Treasury. A reserve or upset price (Crown dues plus Crown evaluation) further ensured that revenues would at least meet the costs of administration. It is possible too, that in setting its upset price for timber, the Province adjusted it so that wood which was difficult to log became a commercially attractive proposition.

The introduction of the negotiation method for setting stumpage adapted the auction system to changes in the economic system; particularly to the rise of large and powerful forest companies. These concerns virtually monopolized demand in a given area and required large reserves of raw materials if the economies of large scale production were to be maintained. The position of Crown dues in these negotiations appears to the author to be that of the reserve or upset price under the auction system. Because of the indeterminate elements in the negotiations, it is probable that under this method a larger part of the economic rent would go to the purchaser of forest products than under the auction system.

This analysis shows that the two methods of stumpage valuation which existed under the Ontario Government's former liquidation policy were adapted to the disposal of timber at auction and by negotiation. Under the former situation, the

reserve price comprised Crown dues and the Crown evaluation. The bid bonus and the Crown evaluation adjusted stumpage to market conditions. Under the latter situation, Crown dues alone set the reserve price and the negotiated bonus was used to bring this price nearer to what the government and the negotiating company thought the market price should be.

How successful these two methods have been in ensuring that the Province obtained its proper share of the economic rent, depends then on the level at which Crown dues have been set and on how closely the final contract price has approximated the competitive market price. The one factor within the government's control has been the level of Crown dues. How this has been set the author cannot state exactly. Apparently it resulted from some evaluation which the government placed upon the forests in the light of the existing economic condition of the forest industries which (a) require cheap raw resources if they are to maintain their competitive position, and (b) the government's own expenditures on forest administration and protection. As these costs have mounted with the years and with the realization that the forests, as a limited resource, needed better protection, the government has insisted that they be met out of the revenues arising from the sale of forest products. This insistence and the economic problems involved have increased the need for a business-like evaluation of stumpage.

Stumpage under a Sustained Yield Forest Policy

If Ontario's forests were fully under management for sustained yield, the disposal of forest products could be readily patterned on general business practice. In effect, the government would be in the business of growing wood on Crown lands. Such a situation presumes that the Province accepts full responsibility for the proper care and development of its forests; that it has evolved some system for carrying this responsibility into effect; and that it has knowledge of its costs of operating the business. Once in this position the government should be able to market its products systematically - discarding from intensive management those areas which are sub-marginal; managing more intensively those forests yielding the highest profit; and holding for future market products presently saleable only at a loss or small profit. It would be out to provide raw materials at prices which would leave the forest industries in position to meet competition from other companies and other products.

This simplified model ignores the complexities raised when trying to estimate the dollar values of the non-timber uses of the forest. As the government is running this large scale forestry business, it must protect these non-timber uses; they must be reconciled with the timber uses. And their values will have to be reflected somehow in the government's pricing system. For it seems only logical that management of wild life, recreation,

etc., associated with the forests, should be handled along with forest management for wood products.

Looking more closely at the model, one may ask many questions which seem almost unanswerable today. Will it ever be possible (or desirable) to place dollar values on the forest's non-timber uses? How long will it be before the provincial authorities know all the costs of managing the Province's productive forests? What share of these costs will be borne by the forest companies? Will it be possible for the government to conduct its forestry business in a suitably simple, decentralized manner? Can it do so in a manner that will ensure that the forests receive proper attention and yet will allow business practices to be used? These are but a few of the pertinent questions which must be asked. For certainly the present situation of the Province's forests does not approximate that of the model.

Stumpage Appraisal

Provincial forest authorities have sought a compromise which would adapt their established licensing system to present conditions and the new requirements of a forestry business. They seek to introduce the "Stumpage Appraisal" system for evaluating stumpage. This would be used particularly where timber and pulpwood agreements involve large tracts of timber. With the appraisal method stumpage is a residual value. It is

"the proportion of profit of a timber operation which is attributable to the growing of timber".[1] Love ((52) p. 5).

A brief prepared by Prof. D. V. Love, ((52) p. 5), provides an outline of how stumpage would be appraised in Ontario.[2] This outline is summarized here.

(1) Timber authorities, with the co-operation of industry, would compute the average costs of producing primary wood products for a region or district. These costs would be based upon analysis of the costs of a representative group of operators in such districts, chosen to provide a cross-section of operating efficiency and conditions. If variations in conditions warrant it, these costs may be altered when computing the average or normal costs.

(2) Assessment of any individual operator's costs for operating his limits would be based on the pertinent regional normal costs, adjusted to his particular operating conditions (accessibility, topography, etc.). The operator's own logging efficiency would not enter into this conventional calculation.

(3) Where market values are known for primary wood products, a conversion return would be found by deducting

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1. Prof. Love's brief was prepared at the request of the Ontario Department of Lands and Forests.
2. A detailed description of the stumpage appraisal method may be found in Methods of Stumpage Appraisal, by Prof. D. M. Matthews as Part V of the Manual of Timber Management published by the Ontario Department of Lands and Forests, 1948.

from the market value the operator's normal costs of extraction. A portion of this conversion return would be attributable to the operator as profit and return for risk on his conventional normal costs. The remainder will be the stumpage value of the products.

(4) Where market values are not known for primary wood products, the conversion return must be determined by working backwards from the values of the end products of the operator. Allowance would be made for cost, profit, and risk in the manufacturing steps involved. The authorities would then compute stumpage values from the conversion return as in Sec. (3).

The full co-operation of industry in providing basic cost and price data, is essential to the success of this appraisal scheme.

Exponents of stumpage appraisal claim that it should produce the following results, Love ((52) pp. 6-12):

(1) Increased operating efficiency because of the spur given to inefficient operators to bring their costs into line with normal costs.

(2) Practical standards of utilization and operating techniques. Stumpage appraisal should indicate the economical rate at which intensive management policies can be instituted without any sector of the forest economy incurring undue financial burdens.

(3) Disposition of raw material to the products it is best suited to produce. Stumpage appraisal of the value of timber where it is to be used for products of high quality under given volume and market conditions, would discourage its use for products of low quality, particularly if timber in smaller sizes at lower rates can be obtained.

(4) Equitable distribution of the cost of governmental care of the forest resource. Exceptionally valuable resources would receive proportionately more care and attention than areas whose products were low-valued or almost worthless.

(5) Promotion of the most efficient use of the products of the forests. By proper adjustment of rates, industry may be encouraged to use products it would otherwise ignore or prefer to utilize only to a limited extent.

(6) Sensitivity of rates to changing economic conditions. Recurrent assessment of the appraisal rates would keep them in line with current business conditions. Any changes in the local or general economic climate would be reflected in stumpage rates. Neither the government nor industry would suffer at the expense of the other. Stumpage appraisal would also permit

the government to adjust its prices if it wished to place Ontario industries in a more favourable position in world markets.

(7) Sensitivity of rates to changing operating conditions. Recurrent assessment of rates would tend to keep them in line with costs of operation which may vary as different sections of large timber tracts are brought into operation. Rates would keep abreast with progress in operating techniques.

(8) Removal of incentive to traffic in Crown timber. Crown stumpage would closely approximate market values for primary wood products. No additional margin would exist above the conventional profit and return for risk which might encourage a licence holder to sell his timber or rights to another person.

(9) Government forest products selling at competitive prices with products from private forests. The present unfavourable position of private forestry would be eased.[1]

In the absence of accurate cost and market price data of its own, stumpage appraisal does appear to be the government's best way of ensuring a proper selling price for its products -

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1. This point is from an unpublished addendum made by Prof. Love to the brief Stumpage Appraisal and Forest Management.

a price which nets to the Province a maximum amount of the economic rent owing to it.

Stumpage appraisal has received considerable criticism, especially from the operating companies. The following are five comments which have substance, Love ((52) pp. 13-16).[1]

(1) Appraisal would be inaccurate because of uncontrollable variables. Certainly, operation costs will vary, particularly from one season to the next. In this event a company's costs may be above normal one year and below normal the next. Exponents of the appraisal system claim that data which have been collected indicate that total logging costs can be predicted on the average with reasonable accuracy. They further point out that the 20 per cent rate proposed for profit and risk on normal costs, would be generous enough to allow a profit of some kind even if actual costs may be quite high. Provincial authorities have also indicated that they would be prepared to consider any company evidence documented by records, that it is being unjustly treated. Such evidence would then indicate whether or not adjustments to the rates would be warranted.

(2) Political conniving would not be eliminated by the appraisal method. Indeed the system would not eliminate the process of negotiation by which timber agreements would be made.

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1. The first four points only are raised by Prof. Love.

However, it probably would strengthen the Province's bargaining position in these negotiations - a factor which industry is bound to fight.

(3) The government would control profits and thereby stifle competitive enterprise. There is no doubt that industry will always oppose paying for anything on a basis which allows them to make but a limited profit. The level of profit proposed by the government appears to be generous. Based on average costs, it may well be above actual profits. The authorities feel that at present the forest industry is receiving a considerable portion of the economic rent which should rightfully come to the Province. And this situation must be remedied. Because company wood costs would rise with an increase in stumpage rates, the authorities believe that more of the income stream will be directed to the Province through a reduced flow into federal income taxes.

(4) Adequate trained personnel would not be available to conduct appraisal work. This is a serious criticism which would have to be fully met if the Province were to gain company confidence in stumpage appraisal. It is but one facet of the dearth of men and women trained for the forestry profession. Yet it is a criticism of stumpage appraisal which could be met, for the technique can be mastered.

(5) There is a further criticism which possibly is more fundamental.[1] This is the reliance on a method whereby stumpage is established as a residual value, what is left after deducting from the market price of forest products, the costs of extraction and a conversion return on these costs to cover profit and risk. It is a negative approach which lays no impulsion upon the government to find out its own costs of production and management. Stumpage appraisal is the antithesis of the usual business practice where pricing policy has a close relationship with costs within the industry. Sooner or later the Province will have to relate its prices to its own costs[2] - not those of its customers. This objection may be tolerated, of course, if it is understood that stumpage appraisal would be adopted only as an interim solution to the government's pricing problems; a solution adapted to handle stumpage for existing stands of merchantable timber and not future crops.

Ontario's forests have been sadly over-exploited in many areas. Large sums of money must be spent if they are to be restored to anything like their former state. Many people with a keen interest in this situation have urged the Province to ex-

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1. This point is not made by Prof. Love in his brief, op. cit.
2. It is recognized that the degree of correlation between costs and prices will be affected by the fact that Ontario's forest industries must sell their products in keen competition with outside producers in both domestic and foreign markets.

pend on the forests all the revenues that it derives directly from them - almost all of which come from stumpage. Generally, the Provincial government, is doing this. But it is still not enough. Can stumpage rates be raised sufficiently to yield the required revenues? In the end the answer will probably be no.

It would be a mistake to rely too heavily upon stumpage in raising the required money. Stumpage, because it is one of the forest industry's production costs, appears in the price of the manufactured wood product. And because the industry's competitive position depends in large measure upon its price levels, cheap stumpage is desirable as a means of maintaining competitive prices. Can Ontario's lumber industry maintain its present position in domestic markets if the prices of its raw materials - saw-logs - are raised? It is extremely doubtful if lumber prices could be increased significantly without the industry suffering loss of customers - not only to competing lumber industries but to producers of substitute materials. To some extent, the same conditions hold in the other forest industries. Increase stumpage and the Province runs the risk of having its forest companies priced out of the markets.[1] It is probably

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1. Comparative wholesale prices for lumber f.o.b. Toronto, 1952.

Ontario white pine, D and Better, kiln dried	- $262.00/M.f.b.m.
Brazilian Parana pine, D and Better, kiln dried	- $172.00/M.f.b.m.
Eastern Spruce and Balsam, No. 2 and Better, 1"x 6" - 1"x12", 6' to 20' - air dried	- $132.00/M.f.b.m.
- kiln dried	- $137.00/M.f.b.m.
Douglas fir and western hemlock C and Better, 1" x 4" - 1" x 12", 6' to 20', - rough, kiln dried	- $166.50/M.f.b.m.

true, as was pointed out above, that some concerns have negotiated such satisfactory pulpwood and timber agreements, that they are getting more than their fair share of the economic rent on primary wood products. To this extent stumpage could justifiably be increased without the forest industries needing to raise the prices of their products. But again it is very doubtful whether the increased yield which would result, would go very far in meeting the great need for higher government expenditures on the forests.

The speculative economic circumstances of the lumber and other wood-using industries, suggests that stumpage should be flexible. By lowering rates during a business recession or when competition is extreme, the government and the people share in the forest industry's distress and also in the cuts necessary for business to regain its strength.

Once the contract for a timber licence or agreement has been signed, Crown dues remain the only element in stumpage which may be adjusted by the government without renegotiating the contract. And yet, the provincial authorities tend to hold these dues stable, changing them only slowly over the years. Therefore, stumpage, as it is now determined, appears to be a decidedly inflexible price - particularly if the licences or agreements are in force for a considerable length of time. Certainly stumpage will not automatically adjust to changes in

the current economic climate.

Stumpage appraisal will doubtlessly add flexibility to this pricing system if the period between reappraisals is kept short. Yet this method of evaluation is not self-adjusting either. It is possible, of course, that as long as stumpage is to be included in a contract covering a number of years, neither party would wish the rates to be too flexible.

This point concerning the role of stumpage as one of the determinants in the prices of forest products, receives further treatment in Chapter VI.

Undoubtedly the present active interest in stumpage evaluation derives from the Province's insistance that the costs of managing Ontario's forests should be met generally from the sale of forest products, and from its desire to see that the people receive full value for their forest products. From these points and the remarks made above, it is apparent that the problem of stumpage rates is tied in with the general administration of the forests. This study cannot go into the question of what is the best method of administering the Crown forests. But one may ask whether all expenditures on such administration need be or should be met from stumpage alone? In effect, this question leads to more fundamental ones. Should the Province manage its forests as a "business"? Is there no alternative which may be simpler to carry out - a method

whereby raising government revenues would be based on accepted tax principles rather than pricing principles? Insofar as these questions concern this study, they will be discussed in Chapter VI.

Summary on Stumpage

From this rather cursory survey of stumpage one may make these main points. First, stumpage is a method of raising government revenues which has been long established in the Province. Possibly it was first conceived as a tax but it early became accepted as a price. Second, although of doubtful significance, when it is considered as a price under competitive conditions stumpage does possess the regulative aspects of any price system of rationing. Third, the Crown dues portion of stumpage possesses some features of a tax. These dues can be arbitrarily adjusted by regulation. Furthermore, their reaction to short-run supply and demand fluctuations in insensitive. The importance of this point will vary as it depends upon what proportion of stumpage is made up of Crown dues. Fourth, treatment of stumpage as a price has created difficulties as the government tried to adapt its licensing system to present economic conditions. As a price, it is relatively inflexible. It does not adjust automatically to changes in the economic climate. Fifth, Stumpage Appraisal has been proposed as a means of solving these difficulties. As an interim method for pricing the Province's forest products, it does

have considerable merit. It introduces some flexibility into stumpage evaluation. Sixth, the problems involved in finding a suitable means of assessing stumpage cast some doubt on it being a satisfactory way by which to raise Provincial revenues. It may be desirable to replace stumpage by some other system based upon accepted tax concepts.

Appendix I

Definitions

Harold M. Somers ((81) p. 149) has defined the impact of any tax as the point where that tax is imposed by law. The federal and provincial corporate income taxes have their impact on the corporation. While in appearance the gasoline tax falls on the vendor, by law it falls on the customer. The gasoline seller acts as government's collecting agent.

Shifting

When a taxpayer forces some one else to pay a tax, he has shifted it, Somers ((81) p.150). When a corporation considers its property tax or any other tax as one of its overhead costs and includes it when setting the selling price of its product, it will have shifted the tax or a portion of it to the consumer. Thus partial or total shifting can occur.

Shifting has direction; forward and backward. When a manufacturer passes on a tax to his customers in his selling price, he has shifted it forward. If the price is kept constant but the manufacturer after being taxed, buys cheaper raw materials or services, the tax will have been shifted backwards.

Market-period, short-run, and long-run shifting definitions are analogous to Alfred Marshall's market, short-run, and long-run supply, Marshall ((57) pp. 274-275 and 312-315).

In the market period shifting takes place through a change in price of the supply of goods now on hand. Short-run shifting takes place through alterations in the price of the supply of goods expected to be produced by existing productive facilities. Long-run shifting takes place when prices change as a result of changes in productive capacity, Somers ((81) pp. 151-153).

Incidence

The point of incidence of a tax is where its burden finally rests, Somers ((81) p. 153). It may be claimed that the tax's incidence is never really known as it is shifted ad infinitum. That may be true sometimes. But for practical analysis a final resting place can usually be found. To assist this analysis, market-period, short-run, and long-run incidence concepts have been developed to make some allowance for time. These correspond to similar phases of tax shifting. Somers suggests associating the idea of "final" incidence with long-run incidence.

Effects

Broad considerations of what may happen to consumption, the standard of living, employment, investment, savings, production, etc., concern the effects of a tax, Somers ((81) pp. 162-163). Shifting is an effect and there is not a sharp line between a study of tax incidence and the effects of a tax. However, this division is reasonable and helps in any tax analysis.

Stumpage

Stumpage - the Provincial government's charge for its

forest products - comprises three elements today. These are Crown dues, the Crown evaluation, and the bid bonus. When stumpage was introduced in 1826 it was made up solely of the dues levied by the Crown. These appeared in a schedule stating the rates per cubic or lineal foot for the different kinds of timber cut. In 1827 limits were auctioned to the operator and the Crown dues became, in effect, the reserve or upset price charged for the wood. Over and above this the operator agreed to pay a bonus whose size was determined at the auction. This bid bonus was paid as a lump sum for many years but was later prorated over the timber cut. In the regulations of 1866, the government adopted the Crown evaluation when it placed an initial upset price on all timber berths to be auctioned in the future. This price was based on area and was additional to the Crown dues. At a later date it was prorated over the timber to be cut. While usually the sum stated in the regulations, the upset price could be varied. This led to an evaluation system whereby the administering authorities set the reserve price to take account of the general market value of the timber and its location, accessibility, etc. Once set for a timber limit, this Crown evaluation does not alter. Today, when a limit is auctioned, the upset price includes the Crown dues and the Crown evaluation. The Crown dues are the only rates adjustable during the term of the licence.

When a licence or agreement is negotiated for a large timbered tract, neither the Crown evaluation nor the bid bonus appear as such in the final stumpage charge. A bonus price is negotiated which is to be paid in addition to the Crown dues. These two elements only - the bonus and dues - make up the stumpage charge.

To summarize, depending on the manner of disposal of the cutting rights, stumpage may take one of two different forms:

(a) When a licence or permit is disposed of at auction or sale, stumpage consists of (i) the Crown dues which may be adjusted at the government's discretion; (ii) the Crown evaluation which when added to the dues, sets the reserve or upset price at which the government will accept bids; and (iii) the bid bonus which the operator offers over and above the reserve price.

(b) When a licence or an agreement is negotiated the stumpage consists of (i) Crown dues; and (ii) the bonus agreed upon by the operator and the government.

Stumpage charges are paid after the timber has been cut and scaled (measured) by government scalers. Rates are based on the unit of measurement associated with the product: i.e. pulpwood, per cord; sawlogs, per thousand board feet; rail-

way ties, per tie; poles, per pole, etc.

This note is based largely on Part I and 1949 Supplement to Part I of Manual of Timber Management published by the Ontario Department of Lands and Forests, and the brief, Stumpage Appraisal and Timber Management, by Prof. D.V. Love, cited above.

Appendix V

This appendix contains a brief theoretical analysis of the effects of the corporate net income tax upon business enterprise.

Effects on Demand and Consumption

Assuming given supply and demand schedules for a particular commodity and assuming that the tax is shifted forward by increasing prices, a shift in demand to the left along the demand schedule DD will occur. Less goods will be demanded at the higher price. (See Figure 1). To restore equilibrium between demand and supply, production at the higher price must be reduced. This means a shift of the supply curve to the left - from SS in the diagram to S'S'. A new equilibrium E' will be reached at a lower output and at a higher price. The degree of change which results will depend directly on the elasticities of the supply and demand schedules. These elasticities set the slopes of the curves in the neighbourhood of E and E' in the diagram.

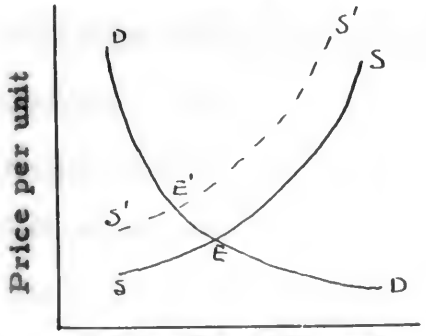

Figure 1

DD - demand schedule

SS - initial supply schedule

S'S' - subsequent supply schedule

E - initial point of equilibrium

E' - subsequent point of equilibrium

A very inelastic schedule is one approaching the vertical and a very elastic schedule is one approaching the horizontal. These statements do not apply, however, to either the upper or lower sections of the demand and supply schedules.

One may hesitate to link with any tax the effects of government expenditures out of the money raised from taxes. Yet taxes and in particular the corporation income tax make such expenditures possible. These may have decided effects on the demand for both consumption and capital goods. They may cause the demand schedule in Figure I to shift to the right (meaning an increased demand at any given price) to such an extent that prices will increase by more than the amount of the tax. Furthermore, production would not necessarily be reduced following the price increase. The shift in demand from one type of commodity to another as result of the shift in purchasing power from the individual or corporation to the government, will be difficult to foretell unless the bulk of the government's expenditures are known in advance. It is possible that the government will use its tax receipts for the retirement of debt rather than for expenditures on capital or consumer goods.

If the company's shareholders bear all or part of the income tax, a decided degree of re-allocation of income occurs. Insofar as the shareholders are wealthy individuals a levelling of the country's income distribution follows. A minor outcome

of such incidence of the tax could be a reduction in consumption by the shareholders. This results from the theory that a part of the individual's dividend income lost in taxes would have been spent on consumer goods.

Effects on Wages

Insofar as the tax may be shifted backwards, wages paid by a corporation might be reduced or held at a given level longer than would be expected. A shift in labour away from the industry may follow depending upon labour's mobility and the elasticity of supply of labour. Reduced expenditure on certain goods might well follow a reduction in wages.

It is possible that heavy corporation taxes might encourage some companies to pay higher wage rates and thereby reduce the size of their taxable income. However, this would mean the companies would be less able to pay as much to labour in the aggregate. In effect they would be less able to expand their labour force.

Effects on Savings

Corporate savings or undistributed profits. Assuming that the tax is not shifted or only partially, and that there is some normal level of business saving, it seems likely that in order to pay the tax a company would reduce its savings to a greater extent than it would its dividend payments. The firm would do this because it believes that it is wise to keep dividends up in order to preserve

the company's position in the capital market. However, the opposite view might be taken if a firm still feels able to finance expansion from savings or temporary borrowing.

Continuous rising prices will in time greatly reduce the value of depreciation and depletion reserves which a company has built up in the past. Insofar as the corporate income taxes contribute to these rising prices, so do they contribute to the depreciation in value of these reserves.

Individual savings. Because prices may rise as a result of the corporate income tax, personal savings of the lower income groups are likely to suffer. An individual's consumption habits are less flexible than his savings plans. Price increases will be met to some degree out of savings and this may have a secondary effect on investment plans as mentioned below.

The force of this point has been tempered in recent years with the rise in systematic saving for retirement, for repayment of mortgages, and for life and health insurance. In turn such systematic saving schemes will tend to alter the pattern of investment of savings.

Insofar as an individual's dividend income may be lowered by taxation, his savings plan may be altered. This too may influence future investment.

Effects on Size of Business

The federal corporation income tax does operate in favour of the firm with low earnings (not specifically a forest industry). Assuming net taxable incomes of $15,000 and $100,000 the respective taxes as percentages of these incomes would be 25.9 per cent and 44.3 per cent for the 1951 taxation year.[1] However, there are counter-balancing factors. It is probable that large concerns derive their income from a wider range of sources than do small companies. Thereby the large company may more easily balance out losses in certain ventures against profits in others. Furthermore large companies may achieve economies of large-scale business operations.

Effects on Business Investment, Incentives, and Financing.

Assuming that the shareholders bear all or a large part of the corporation tax burden, the tax reduces the return on their investment by reducing the amount of net income after taxes. This fact may discourage new investment in the industry when it is sought. Thereby normal growth may be curtailed. Similarly, investors may hesitate to sink money in risky ventures - ventures essential to keeping our economy dynamic and expanding. This view does not account for those people who believe the opposite; that high tax rates prejudice stable industries. It is probable that the venturesome investor will continue to put his money into

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1. Using tax rates of 15 per cent on the first $10,000 of taxable income and 47.6 per cent on the remainder.

risky enterprises until the tax becomes confiscatory. Generous offsets for losses may reduce the above discouraging aspects of the tax.

Yet another effect of reduced returns on equity capital, is the incentive for new investment to seek tax exempt alternatives such as bonds or mortgages. The effect of this on business financing is apparent. Debt financing would be favoured at the expense of equity capital. Any increase in bonded indebtedness means added rigidity in the industrial economy and more likelihood of bankruptcies and failures in depression periods.

As the marginal efficiency of capital is reduced by the tax, it approaches individual and corporate marginal rates of liquidity preference. People and business prefer more and more to retain their money in cash or savings rather than invest it. Another variation is for the individual to prefer to spend his money on durable consumption goods rather than invest it, and finally to spend it on non-durables. Less drastic would be a movement of capital into investments more readily convertible into cash.

This consideration of new investment has made no reference to the relationship between savings and investment. New money placed in industry must come from savings, from bank credit, or (less commonly) it is created by the government without borrowing operations (fiat money). If taxes reduce savings or the rate of savings, they will tend to have a similar linked

effect on investment.

In sum, these points indicate a loss in the incentive to invest if corporation income tax rates are too high or if the taxes cannot be shifted. Not only this but it means an unfavourable change in business expectations.

The value of loss offsets in minimizing unfavourable tax consequences has been pointed out above. Any reduction of the risk in investment will have a similar value. For example, a rapid write-down of capital expenditures will reduce a firm's risk in recovering such investments. Business will undertake new expansion more readily. F. Rothschild ((77) pp. 25-26) probably was correct in concluding that the fear of possible loss is often more important in business decisions involving large uncertainties than is the hope of profit. And further, a reduction in risk is more important as an inducement to invest than is a proportionate increase in profits.

Effects on Business Production and Prices

Backward shifting of the corporate income tax onto the factors of production has been noted. Through the effects of this shifting on alterations in input, industrial patterns may change. Cheaper substitute raw materials may be used or new ones discovered. Furthermore, employment may fall as a result of changes in production methods. This in turn may alter consumption habits. And so on. It is possible that new

and more economical production processes would result from a need to reduce costs. These may obviate price increases or stimulate new businesses.

Somers ((81) p. 224) has pointed out that curtailment of capacity in industry through lack of investment will affect production costs in several ways. These depend on economic factors.

> "The reduced capacity may mean higher, lower or constant costs depending on whether long-run decreasing, increasing, or constant costs prevail".

Under competitive conditions prices will change correspondingly to costs. If reduced capacity meant a reduction in competition, prices would probably rise.

Upward changes in tax rates will generally cause business men to review their pricing policies. Such study may indicate that prices can be and could have been increased without fear of a loss of markets.

Effects on Capital and Business Location

Assuming that the corporate income tax is harder to shift in some industries than in others, (e.g. export industries and highly competitive ones), capital may be withdrawn from one industry and invested in another which can more successfully shift the tax. If tax rates are not uniform, capital will tend to move to areas where lower taxes prevail. Such inequalities in

tax rates may prejudice new industries against entering certain areas unless other inducements outweigh the tax differential. The mobility of capital is difficult to assess but it is an important factor when one tries to predict the consequences of certain taxation policies.

Effects of the Tax and Business Conditions

If the tax results in a decrease in savings and investment, it is deflationary to the extent that there is no offsetting in consumption, either social or individual. When production is curtailed in order to maintain higher prices, the process may lead to a deflationary spiral. This is particularly so, if the effect should coincide with a general trend towards a business recession. However, Goode (37) concludes that when all variations in aggregate demand and all the indirect effects of the tax and government expenditures are considered, the corporation income tax is on balance, stimulating to aggregate income. In other than inflationary conditions, this expansionary effect of the tax is good. However, such an analysis must take into account so many variables and subjective estimates that no precise conclusions can be reached.

This analysis of the effects of corporate net income taxes upon business enterprise, has been concerned largely with corporations selling in internal and highly competitive markets. The conclusions reached may be modified considerably if the

effects of these taxes are studied for the firms which sell in export markets or under monopoly or monopolistic conditions.

Appendix III

As part of the background for this tudy, the author undertook to sample the opinions of men within the forest industries, the federal and Ontario governments, and the universities concerning their views on taxation and its relationship to forest management. An effort was made to find out what problems existed in this field of forest taxation and how these problems had affected both company and government forest policy. It was necessary then to reach men who could and were prepared to speak on such matters.

Discussion were held with men in the federal and Ontario governments (both forest and tax authorities), with executives of most of the large pulp and paper companies, with men in trade associations, and with forestry and economics professors at the University of Toronto. To supplement these discussions, the author held conversations with men in similar positions in Quebec and New Brunswick.

Polling the opinions of executives of the lumber industry proved more difficult owing to the wide dispersion of the industry throughout the Province. To accomplish this, a list of over 60 of the large sawmill operators who either owned or leased their own limits was compiled from the Dominion Bureau of Statistics publication, List of Canadian Sawmills, Canada (14). To the heads of these companies, the author sent a ques-

tionnaire on taxation accompanied by a covering letter and a stamped self-addressed return envelope. The questions asked in this questionnaire were similar to those asked of executives in the pulp and paper industries. As some questions dealt with private matters of the companies, all data have been treated as confidential and will not be published. Returns were received from over a third of the companies polled. Generally the information given was quite full and useful to this study.

The following are the questions that were asked in the questionnaire:

1. Is your company operating a plan for the management of its holdings of forest land for a continuous yield of forest products?
2. What in your experience are the chief hindrances to the successful establishment of your management plans?
3. If taxation is one factor in your answer to question (2), why is it?
4. What taxes does your company pay? Please check and list other taxes.

   a. Federal income tax?
   b. Provincial income tax (general)?
   c. Provincial tax on income from logging operations?
   d. Other provincial corporation taxes?
   e. Provincial land taxes?
   f. Municipal land taxes?
   g. Federal sales taxes?
   h. Other taxes?

5. Has your company objection to any aspect of the taxes it must pay? Please check and name tax.

   a. Method of collection?
   b. Tax base?
   c. Rate of tax?
   d. Method of assessment?
   e. Tax regulations such as depreciation or depletion allowances?
   f. Other reasons?

6. In your opinion are the regulations concerning depletion and depreciation allowances for federal income tax purposes reasonable? If not, why?

7. Does your company consider the annual assessment for income taxes as a cost of doing business to be recovered in the price of your products?

8. Can you estimate what ratio your company's annual tax bill (for all taxes) bears to total operating costs? To gross receipts?

9. Do you feel there is any uncertain aspect in the present tax system? If so, where?

10. Have you experienced any problem where tenure of your forest lands bears upon your taxes? For example, have you been taxed on any capital gain arising from your holdings of timber land?

11. Have you any suggestions for altering any part of our tax systems - federal, provincial, or municipal - which in your opinion might improve forest management in this province?

12. If you agree that the provincial government should share in the expenses of management of the forests, how would

you suggest that it should do so?

13. If tenure of forest land is of importance in your answer to question (2) why is it so?

14. What proportion of your forest holdings do you hold in fee simple?

15. Do you feel any insecurity of tenure of Crown lands?

16. Are there any other remarks that you would care to make concerning either taxation or tenure of forest lands?

Chapter IV

FOREST TAXATION IN OTHER COUNTRIES

The purpose of reviewing forest taxation in certain other countries is two-fold. First, it is to be generally informative and second, it is to look for ideas and methods which might improve the tax systems of this country and the Province of Ontario.

It must be emphasized that few if any countries have the constitutional framework that Canada possesses. Certainly the countries reviewed below are quite different. Yet they all do have some democratic form of government. In many the governmental structure might be likened to that of this Province. Except for the indirect taxes levied by these countries, Ontario could impose all the others without any amendment to the B.N.A. Act.

This review does not investigate all taxes that might affect the forests or forest industries in the countries studied. Generally, it deals only with taxation classed as forest taxation. This applies to owners or operators of timber lands.

Sweden

Individuals or companies, including co-operatives, own between 75 and 80 per cent of Sweden's forest land. Individuals

with small holdings make up over two-thirds of these owners; companies a little less than one-third; the remainder are institutions or individuals with large estates. The state forests amount to about 19 per cent of the country's forests and communal forests, 3.5 per cent.

Forest taxes reviewed here include: the Local Real Estate Tax; the Local Income Tax; the National Income Tax; the National Tax on Property and Capital; and the Silvicultural Charge.

State-financed industries in Sweden operate as do other joint-stock companies. They pay local real estate and income taxes and the national income tax. State forests pay the two local taxes but not the state income tax.

The Local Real Estate Tax

The Swedish government has based this local tax on the assessed capital value of forest land and the timber on it. However, from the following outline of the computation of the tax base, it is apparent that in fact the tax is a sort of income tax with returns which are almost guaranteed; that is it is a tax with an income base which does not fluctuate.

The General Real Estate Assessment takes place every five years. Forest land is valued separately according to its normal timber productive capacity (site quality). Assessment of the timber is at its current value according to the actual conditions of the stand. Assessors determine the total capital

value by calculating the value of the annual sustained yield and capitalizing it at 4 per cent. The procedure is as follows:

(a) Compute the area of forest land in hectares.

(b) Determine the normal annual timber yield (equivalent to normal annual increment) in cubic metres per hectare.

(c) Determine an average site quality class for the whole area from data in the normal annual yield tables provided by the Forest Service. In effect, this site quality class is a weighted average of all the site quality classes actually present.

(d) Calculate the net stumpage value per cubic metre for the average yield of the forest. This stumpage is an average based upon a normal composition. That is, the assessors calculate stumpage as if every year's cutting contained a normal combination of fuelwood, sawlogs, pulpwood, etc. Relevant average prices are used for the different counties. These make allowance for the distance of the forest from the marketing points. From these prices, average costs of operation are deducted to provide a net stumpage value.

(e) Compute the total value of the annual yield by multiplying the area by the normal increment corresponding to the average site quality class and by the net stumpage value.

(f) Reduce this total stumpage value by 30 per cent to allow for general administration and management costs.

(g) Capitalize the value obtained in (f) at a rate of 4 per cent. This is equivalent to multiplying it by 25. In actuality the

assessors multiply the value in (f) by 4 1/2 and 20 1/2. Call these new values (p) and (q) respectively. The value (p) represents the capital value assigned to the forest land. The value (q) represents the capital value assigned to the timber. This value is now adjusted by multiplying it by a factor termed the "relative growing stock". This factor makes allowance for deviation of actual timber stocking from the normal stocking used in (b) and (c), and for deviation of actual age distribution for the rotation period. The factor expresses the actual stocking as a decimal of normal stocking; its range is restricted to between 0.5 and 1.4. Thus a new value (q') is obtained for (q).

(h) Compute the local real estate tax base determining a theoretical annual income of 5 per cent yielded by each capital value (p) and (q'). The communes levy the tax as a percentage of this total theoretical income.

There is a further reduction possible for the value (q). It amounts to 10 per cent and is allowed for the quality of the stand being below normal for the sawtimber class.

It is important to note that the value of the land is determined solely by the volume of timber it is capable of producing under normal forest management. Based on the results of the national forest survey, the Swedish Forest Service has computed normal yields and normal stands for the different areas of the

country. The Service also provides the classification of the normal yield into categories of products. These are accepted in the communes only after study by competent tax authorities. Well in advance of the General Assessment, the government publishes the prices and costs for each county which are to be used by the local assessment officials. Thus there is no secrecy concerned with any assessment.

This local real estate tax does not recognize any ability on the part of the taxpayer to pay the tax in terms of his actual income at time of payment. It must be paid whether he cuts his timber or not. Furthermore, it should be pointed out that the use of the relative growing stock factor prejudices the holding of mature stands of timber which are overstocked. The use of any factory greater than 1.0 means the owner pays a tax on the excess growing stock each year until it is cut. Yet despite these failings the tax does go to great lengths to assess the forest owner according to the ability of his property to yield income if it is managed reasonably well.

The Local Income Tax

This is a proportional tax levied on all income actually received by the taxpayer within the taxing commune and in excess of the conventional income used in computing the local real estate tax. Therefore this theoretical income is not taxed twice. Personal and family deductions are allowed as well as reasonable

costs and expenses.

With forest operations the aim is to tax only the value of the forest's annual increment. Therefore if this increment is cut and sold, tax is paid upon the income received. But if cutting should cause depletion of the volume of the inital timber stand when it was acquired by the owner, then a depletion allowance may be claimed. The owner deducts this from the returns received for the forest products he has cut. This arrangement is followed whether the owner cuts his own timber or sells cutting rights to it. Depletion allowances may be carried forward and accumulated if so desired and may be claimed when the taxpayer feels it is most suitable. If the land and timber are both sold, an allowance for the initial capital invested in the forest may be claimed against the revenue from the sale.

If a depletion allowance exceeds the value of income received, the loss may be apportioned to the operator's other income providing the taxpayer uses the "stand comparison" method of computation.

Depletion allowances on account of forest capital are significant only where a known investment has been made in a stand of timber or a known volume or value can be given a stand at the time of its acquisition. These allowances may be computed by any one of three different methods and a taxpayer need not use the same method each time he claims an allowance. The application of these different methods varies depending

upon the nature of the transaction, as follows:

(a) Allowance for depletion during ownership of the forest.

(i) Stand comparison method.

By this method the taxpayer reckons his allowance with reference to changes in the volume of the standing timber from what it was when the stand was acquired, but with no reference to changes in its composition or value. The allowance granted is equal to the cost value of the reduction in volume of the initial forest capital. When such a deduction is allowed the new basis for future allowances is the initial volume and value minus any depletion previously allowed for.

(ii) Value comparison method.

By this method the taxpayer bases his allowance on changes in the value of his stand. If the present value of the stand of timber remaining after cutting operations, is less than the initial value of the stand at its acquisition the owner may claim a depletion allowance equal to the difference in values. As this method compares the present value with the past initial value of a stand, capital gains appear as income and are taxed. An allowance may be claimed by this method for damage to a forest resulting from attack by fire, insects, or disease.

(b) Allowance for depletion on the sale of forest property.

(i) Stand comparison method.

If the taxpayer uses this method, the allowance which may be deducted from the selling price of the stand is that portion of the selling price which may fairly pertain to the initial volume of the stand of timber at its acquisition. Therefore his deduction is the present value of the initial stand. Any capital gain which may have accrued to this initial volume of timber remains free of income tax. The tax falls only on the portion of the selling price pertaining to the forest increment.

(ii) Value comparison method.

If the taxpayer follows this method, his depletion allowance is equal to the initial cost value of his timber stand. Any appreciation in value is taxed as income along with the value of the forest increment (if the forest has been retained by the owner for more than 10 years).

(iii) The Schablon method.

With this method a taxpayer obtains only a conventional allowance equivalent to the assessed value of the annual yield of the particular forest for four normal years. This is the value found in the assessment for the local real estate tax. The Schablon method was devised for use with forests established on previously clear land.

When timber land is sold within 10 years of purchase the government taxes the whole of any appreciation in value as a capital gain and not as income from an accumulation of the annual increment. This practice of taxing capital gain is to discourage speculation in forest land.

The net taxable income computed for the local income tax is similar to that for the national income tax and the same declaration of income serves for both taxes. However, for local purposes, receipts and expenditures for each commune are shown separately.

The National Income Tax.

Except for certain differences for personal and family deductions, the taxable income for this tax is computed similarly to that for the local tax. It covers income from all communes. The forest owner may deduct the local income tax from income. This state income tax has progressive rates.

Where a company owning forest land also owns the industrial establishments for the conversion and sale of wood products, the firm must treat the income from the woods operations separately from income derived from its other activities. That is, it files separate income tax returns. The state income tax on joint-stock companies is a proportional tax. Double taxation of corporate income occurs for dividends are subject to the same tax in the hands of the shareholders. While depreciation and

depletion claims receive generous treatment as to rates and deferment, company losses must be borne in the year incurred and may not be carried forward.

The National Tax on Property and Capital.

This is a percentage tax on the value of all capital and property in excess of $6,000. The method of assessment is to take 1 per cent of the total value of capital and property (less any debts) and treat it as an income. This is then taxed at progressive rates independently from the other income taxes. Joint-stock companies do not pay this tax as the shareholders pay it on the value of their shares.

The Silvicultural Charge.

This levy is a yield tax whose revenues are used by the Department of Private Forestry to promote this field of forestry. It is a percentage tax on the market price paid for wood products cut or sold on the stump. The stumpage prices used to compute the tax are averages of the district stumpage prices over the past four years as used in the communal tax rates. The actual prices are not used.

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The Swedish forest tax legislation attempts to treat people deriving their incomes from the forest, fairly and with due recognition of the basic features of the forest resource. There is some criticism that the taxes are inequitable where forest income

is irregular as it must be from small holdings. Special criticism falls on the state capital and property tax which does not take account of the taxpayer's ability to pay his tax. However the system does try to treat the forest owners equitably while recognizing the government's needs for a steady flow of revenue. In doing this the tax system appears to become too complex. Yet the degree to which forestry had advanced in Sweden along with the detailed forest data available make application of the forest taxes much simpler than would seem possible.

In addition, the following grants in aid available to forest owners alleviate somewhat the burden of taxation.

1. Grants up to 50 per cent of total expenditures on drainage of forest land.
2. Grants up to 50 per cent and even 75 per cent of the costs of clearing and preparing land for afforestation.
3. Grants between 40 and 75 per cent of the costs of construction of new roads. For main roads the grant is always 50 per cent or more.
4. Technical advice and assistance free or at very low cost.

Norway

Privately owned forests comprise about 80 per cent of Norway's forested lands. State forests account for another 10 per cent and other bodies hold the remainder. Corporations own

just over 8 per cent of the private forests. Almost a third of forest holdings are less than 250 acres in size; another third are between 250 and 2500 acres; and the remainder are over 2500 acres in extent. In general the state forests are in the more poorly forested areas.

This outline covers the following Norwegian taxes: the National Income Tax; the Local Income Tax; the Afforestation Tax; the Land Tax; the Sales Tax; the Forest Improvements Tax; and the Transfer Tax.

State forests pay the local income tax on actual income rather than on a conventional basis.

The National Income Tax and The Local Income Tax.

These income taxes are paid on a conventional income which is assessed each year. The annual forest increment valued at normal current prices forms the tax base. In making each assessment the forest area is considered as if it were under efficient management for a sustained yield.

Each commune handles the assessments of land within its bounds. A National Assessment Board supervises their work.

In order for the authorities to make an assessment of conventional taxable income each owner must declare what is the capital value of his lands. A close approximation to the actual forest income serves as the basis from which this capital value

is computed. This approximate income is the net value of the usable forest increment calculated by multiplying the annual sustained increment by the local current price per cubic metre and then deducting costs of administration and operation. While costs of operation are based on the operator's records, he takes as his deduction for administration costs 6 per cent of the gross value of the increment. The net income so derived is capitalized at 4 per cent interest to give the capital value of the forest. The taxpayer may deduct from his capital value any debt on the property as well as certain personal and family allowances. Further adjustments are made for any surplus or deficit of mature timber in the stand and for returns from hunting and fishing privileges. The tax authorities set the conventional income at a percentage (presently 4 per cent) of the capital value finally reached. From this conventional income a taxpayer may take off all interest paid on debts. The rate set for computing taxable income may by law vary between 2 and 7 per cent.

Assessing officers check a property's capital value each year according to current prices and working costs for the district. That each forest is assessed individually for yield, wholesale unit prices, and costs must be emphasized. To be allowed as deductions from income, expenditures must not have increased the capital value of the forest but served only to maintain its productive capacity.

The local income tax is proportional (a single percentage) but the state tax is progressive. The communal tax may not be deducted from the taxable income for the state tax.

On sales of timber land of over 2,000 hectares Norwegian tax officials view any appreciation in value as capital gain. It is included with income for tax purposes. A forest owner may claim an allowance against this tax for the value of the forest increment which has not been cut.

Corporations treat the income received from forest operations separately from income and industrial activities. Taxable income from the latter is an average of the actual net income received in the past three years.

The Afforestation Tax.

This is a yield tax of 2 per cent on any sale of wood products from the forest. The taxpayer deposits the money in the state bank where it is kept in an account under his own name. After incurring any expenses for replanting he may receive payment for these from the funds he has paid to the bank. In addition he may apply for a state grant equivalent to 40 per cent of such costs. The tax is largely a device to ensure that a forest owner spends a minimum amount on the management of his forests.

The Land Tax.

This is a very moderate, progressive tax of little significance. Presumably it is based on some assessment of capital value. Few

details concerning it are available.

The Sales Tax.

Consumers in Norway pay this percentage tax on all timber (other than raw materials) and paper used in the country.

The Forest Improvement Tax.

This is an export tax paid by pulp mills, sufficient to yield a sum equivalent to 6 kroner for every cubic metre of wood cut in the whole country. Half the money from the tax goes into a fund that is used to assist forest owners to carry on capital improvements. Any owner may request a grant from the fund up to 3 kroner per cubic metre cut in the year in which he undertakes the improvement.

The Transfer Tax.

This tax amounts to 1 per cent of the value of the real estate changing hands and is paid at the time of the transfer.

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As with the Swedish local real estate tax, one might criticize Norwegian income taxes as not respecting the forest owner's ability to pay the tax. Rather they are based on the ability of his land to yield an income. In this regard they are not as fair taxes as those on actual income received. Yet they may well be a good compromise. The taxes appear to meet with general approval from forest owners although there is some local agitation to have

their base changed from a conventional income to actual income received.

Finland

Finland is an extensively wooded country. Over 70 per cent of its land area supports forest cover. State forests comprise 34 per cent of the country's timberlands and are located in the northern and more remote districts. This percentage is considerably greater than that for Sweden or Norway. Companies own 7 per cent of the forests and individuals 57 per cent, making a total of 64 per cent privately owned. Churches and communes own the remaining 2 per cent.

Finnish taxes bearing upon the forests include: The State Income Tax; the Communal Income Tax; The State Property Tax; the Ecclesiastical Tax; the Sales Tax; the Stamp Duty on property transfers; and a Special Compensation Property Tax.

State forests pay communal income taxes in full on the same basis as other forests in the community. They do not pay state taxes. State-financed industries receive the same tax treatment as ordinary joint-stock companies receive.

The State Income Tax.

For forest operations, the basis for this tax is much like that in Norway. The authorities tax a theoretical annual forest income found after classifying the forest according to its site

quality (productivity). The value of the estimated sustained annual yield computed with current prices forms this conventional income. The Forest Service provides the basic data which are used as a guide in assessing the income. A reasonably good standard of management is assumed.

To assess a forest owner, the local Taxation Board must know the forest area and its site classification or classifications. By using the appropriate Forest Service yield data, the Board can compute the owner's theoretical forest increment. The Forest Service also provides data which expresses the proportion of the average forest yield that is made up of sawlog material, pulpwood, fuelwood, etc. An owner's theoretical annual increment is assumed to be made up of representative cubic metres - tax-cubic-metres - of wood whose components correspond to the percentages of different forest products for the area. That is, a forest may be assessed as yielding annual X tax-cubic-metres of wood; each cubic metre being M per cent sawlow material, N per cent pulpwood, O per cent fuelwood, etc. Each commune sets average net stumpage prices according to a price zoning system. These prices are for the tax-cubic-metre and thus are composite prices based on the prices of the component materials of the tax-cubic-metre. An owner's own extraction and operating costs per cubic metre are used in computing stumpage but only an average cost is deducted for general administration and management. The Ministry of Finance must approve all net

prices established. This provides some uniformity in assessments for different communes.

The product of the net price per tax-cubic-metre multiplied by the site factor and the forest area gives the theoretical forest income for the year. Personal deductions are taken from this to obtain the taxable income. If a taxpayer receives income from other sources, he adds it to his forest income for tax purposes.

It should be pointed out that a forest owner cannot make any adjustment to his income to allow for divergence of his forest from the standards set by the Forest Service either for yield or quality. Nor can he make allowance for differences in costs of administration.

The state taxes an individual's income at progressive rates; it taxes corporations at a proportional (single percentage) rate. Business concerns handle their income from industrial activities separately from income from forest operations. With the former, taxable income is the actual net income received after allowing for reasonable expenses.

On the sale of forest land within ten years of acquisition, a forest owner must treat any capital gain as income for tax purposes. Capital gains on sales after ten years have elapsed bear no tax.

The Communal Income Tax

The basis of this tax is the same as that for the state tax.

The local tax is proportional and applies to all income earned in the community. It may not be deducted from taxable income for the state tax.

The State Property Tax

This progressive tax falls on the capital value of all property. For forest land, the capital value is the theoretical annual income capitalized at 3.33 per cent. Tax rates are high and quite steeply graduated.

The Ecclesiastical Tax

While computed as a percentage tax on the communal income tax, the money from the ecclesiastical tax is paid to the parish.

The Sales Tax

This percentage tax on the selling price of timber (except fuelwood) is paid if the product is sold to a retailer or for direct use. Sales of timber for further processing or for export are tax exempt.

The Stamp Duty on Property Transfers

All people purchasing or acquiring any real estate over $1,600 in value pay this tax as a percentage of the property's value.

The Special Compensation Property Tax

Following the loss of Karelia and parts of North Finland

to the U.S.S.R., the government levied a heavy progressive tax on all property. The revenues from this tax were for use in settling refugees from the ceded areas. The tax was to have run for five years and has probably been repealed by now.

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Criticism of the use of a theoretical income for a tax base in Finland runs parallel to similar criticism of the Norwegian tax. Further, some critics claim that the use of average values for management-cost deductions tends to encourage poor management. Expenditures above the average are taxable; those below the average mean tax savings. A recent tax revision committee recommended that the use of a theoretical income for the income tax base, should be modified. They suggested that the tax fall 65 per cent on the conventional income and 35 per cent on the actual income. This compromise suggestion approaches somewhat the Swedish tax arrangements.

Through the Forestry Commission the state grants money to the District Forestry Boards. These funds cover the Boards' expenses for inspections and planning. A Board may provide loans to forest owners at low interest rates and also assistance by supplying labour, equipment, seeds, etc. for forestry purposes. Grants up to 60 per cent of the cost of certain improvements may be made by the Boards. Usually these grants cover

drainage programs.

France

Private individuals and companies own the major portion of the French forests - 63 per cent. The state forests account for 15 per cent while local bodies or communes own the remaining 22 percent. Farm woodlots less than 5 acres in size make up over one-third of the private woodlands; much of the remaining two-thirds are under 25 acres in extent.

French forest taxes comprise the following; National and Local Land Taxes; the National Income Tax; Family Allowance Charges; Agricultural Social Security Taxes; the Production Tax; the Forest Improvement Tax; the Equalization Tax; the Sales Tax; the Transfer Tax; and Succession Duties.

A point in French taxation of interest in this study was the use of taxation as early as 1811 to support the government's forest policy. From that year forest owners who allowed their forests to fully or partially mature into high forests had their forests assessed at the lower values pertaining to coppice forests. This advantage continued until 1908 when high forests were again taxed at their full value.

The National and Local Land Taxes

These land taxes are taxes on the two elements of income from land - rent of the soil and the value of the timber. The

estimated average net annual income from these sources provides the tax base.

Tax authorities have divided the forests according to cover type or type of management; that is, coppice, mixed coppice, and high forests, and hardwood and softwood forests. Each group is subdivided into quality classes. During the years 1910 to 1912 typical forests of each group were selected and average cuttings were made from them. These provided data on timber yield and income per hectare. By dividing this revenue by the rotation period and the yield, the monetary return per cubic metre per hectare per year was found. The deduction of expenses gave a net return. When these data were multiplied by the respective forest areas in the commune, the theoretical net annual increment for each forest resulted. This is the Cadastral Income. The evaluation in 1910-1912 was the last detailed one to have been made. To bring this thirty-year old tax base roughly into line with present day values, tax authorities multiply the cadastral income by a factor, presently 6.

The national land tax is a straight percentage of this theoretical income. The local authorities compute their taxes as so much extra on the basis of the national tax.

One modification of this tax exists in the tax levied upon leased forest land. The tax for these lands falls either on actual gross receipts less 30 per cent for expenses or on the proven

actual net return.

Forest owners may claim an exemption for the first 30 years on all planted or replanted lands. The exemption applies to both local and national taxes and the other taxes listed below which are based on the cadastral income. Thereby young forests have gained a significant concession.

The National Income Tax

This tax is imposed on a person's combined income from all sources. But where any income is from forest land, the tax falls on the conventional income.

While at no time is the actual income from the forest taxed, yet the cadastral income forms the base for three major taxes. Forest industries separate industrial income from that coming from forest operations. Actual net income from conversion activities forms the tax base in such instances while with forest income the company uses its cadastral income for its base.

If fire destroys or damages a forest, tax authorities make an adjustment of the conventional income based upon the proportion of the forest destroyed and its age.

The Family Allowance Charge

The money collected from this tax and the Agricultural Social Security Taxes goes into a fund to provide social benefits

to agricultural workers. The tax is an additional charge added to the land tax. For forest owners it generally equals one-tenth of the charge paid by agricultural land which in turn was supposed to be based on the average number of workmen employed per unit of area. The tax on forest land is based only on forest-maintenance personnel. An additional tax is levied on the wages of men employed in extracting timber if a forest owner operates his own land.

The Agricultural Social Security Taxes

The first of these taxes falls as a straight 32 per cent surcharge on the National Land Tax. Foresters have levelled bitter criticism against this tax on two counts. First, the agricultural land tax is based on rental income for the land only and not on the value of the product as well. Because income from both sources forms the cadastral income, forest owners pay the tax on more income than they should. Second, far fewer men find employment on forest lands. Therefore these lands should pay proportionately less tax.

An additional tax comes under this heading. It is a 3 per cent levy on the value of forest products. Exempted from this charge are fuelwood and sawlogs. However sawn timber bears the tax. The authorities levy and collect this charge along with the Forest Improvement Tax.

The Production Tax.

Two charges come under this heading: the first is a 4 per cent tax on the sales value of all forest products except sawlogs; and the second is a tax of 10 per cent on the sales value of products of the sawmills.

The Forest Improvement Tax

The tax collected is a composite one totalling 10 per cent on the net selling price of forest products (except fuelwood and sawlogs) laid down at the shipping point. This price is net of other production taxes. For sawlogs, the tax is collected on the value of the sawn lumber as it leaves the mill.

The following levies make up the 10 per cent charge: the Agricultural Social Security tax of 3 per cent mentioned above; the Forest Improvement Tax proper of 6 per cent; the Equalization tax of 0.5 per cent mentioned below; and a tax of 0.5 per cent for the benefit of the Timber Control service. The incidence of this composite tax falls largely upon the consumer.

The Equalization Tax

The revenues from this tax go towards a fund used to subsidize the extraction of wood from forests presently too inaccessible to be profitably operated.

The Sales Tax

This tax is a 1 per cent levy on all commercial transactions.

The tax pyramids because each time a product changes hands the tax must be paid on the selling price.

The Transfer Tax

All people on acquiring property pay this tax. On a purchase, the charge is 8 per cent of the sales value. On an inheritance or gift the tax varies according to the relationship of the parties concerned. With this charge there exist significant concessions pertaining to transactions in forest lands. A purchaser of such an area may claim a 75 per cent reduction in the tax if the sales documents are accompanied by a Forest Service affidavit that the lands can be managed for forestry purposes and if the purchaser agrees to so manage them for at least 30 years. The law provides penalties if he breaks this guarantee. Further, where the selling price shows inflation due to speculation the value upon which the tax will be based is the value reached on the assumption that the land is rationally and not speculatively managed.

Succession Duties

Mention of these taxes is made here only to bring out the point that payment of succession duties may be postponed for a period of 5 years. In addition, the successors may obtain a loan at only token interest rates from the Forest Improvement Fund in order to pay off these duties. The authorities hope that these two measures will prevent excessive felling or the

break-up of estates.

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Some criticisms of French forest taxes have been made at several points in this review. It should be emphasized that no tax on forest income falls upon actual income received. Two of the taxes on income are strangely called land taxes. And further, the series of taxes on the selling price of forest products are surely regressive in character.

However, the forest owner in France receives many compensations for the ills of his tax system. Several have been mentioned already. The tax exemption of young forests; the reduction of the transfer tax; and the subsidy for uneconomic operations. Of greater significance is the recent establishment of the Forest Improvement Fund into which goes the money from the 6 per cent Forest Improvement Tax. From the fund the state may make grants up to 50 per cent of the expenditure (or a maximum of $180 to one person) for reforestation, afforestation, purchase of forest equipment, or materials for forest protection; grant up to 80 per cent of the cost for materials for protection against insect attack; loans at 1/4 per cent interest over 50 years for afforestation purposes, the promotion of conservation and better utilization, and for succession duties; and grants in kind of forest materials. When, on request, the state undertakes forestry work for a

forest owner, it recoups its costs from the proceeds of the sale of the forest's products whenever they are cut. Such assistance goes a long way to alleviate the burden of taxes and to promote forest management.

The United Kingdom

In this section the tax system in Britain will not receive the detailed treatment given forest taxes in the countries surveyed above. Only certain features which are of interest to Canadians will be brought out.

A scarcity of home-grown wood provides the background of forestry in the British Isles. The First and Second World Wars caused excessive cutting of the country's meagre timber stocks. Always dependent on imports of wood, this situation of the native forests was one to cause alarm. And the government has taken action to rectify matters as far as is possible. Along with other steps aimed directly to assist forest owners in forest management, the tax system as it affects them has been made as lenient as possible.

This study covers the following taxes: Estate and Succession Duties; the Income Tax; the Profits Tax; the Corporation Duty; and the Land Tax.

Estate and Succession Duties

Under estate duty and succession duty[1] legislation, forest

1. An estate duty is paid on the total value of an estate before it is divided among the successors. A succession duty is a tax on the successor on the value of his succession.

owners receive preferential treatment. On forest and on agricultural lands, the taxpayer pays much lower rates than on other property. On the value of any land upon which trees or underwood grow, he pays duty according to 1919 rates and not according to those set in 1940 for other property. The timber is assessed at the 1940 tax rates. However the duty on timber acts as lien against it and is not collected until the timber is cut. Furthermore, the duty is reckoned upon the value of the timber at the time of death. This value does not form part of the aggregate value of the estate but is taxed separately. The tax assessment exempts underwood from duty. Costs of planting any area may be deducted from the selling price of the timber before the duty is paid. So also may all reasonable expenses if the vendor incurs them. When a legatee dies, the tax authorities cancel any duties outstanding against the timber. They then revalue the stand for new duties. Thus the taxes fall only once on the timber, the single crop of the forest land.

The Income Tax and the Profits Tax

In respect of ownership of their land, forest owners pay income tax under Schedule A on the annual rental value of the land for growing trees. Usually this value corresponds to the rental paid by the Forestry Commission for lands which it rents. Under this Schedule, the taxpayer obtains certain deductions including one-eighth of the assessment for maintenance expenditures. A

further deduction for depreciation may be claimed for the value of certain capital improvements. These values are recoverable over a ten year period.

In respect of occupation of commercially operated forest land, a further tax is levied under Schedules B or D as elected by the taxpayer. The income assessed under Schedule B amounts to one-third the gross income assessed under Schedule A. This is very favourable where forest stands are mature and income therefrom can be expected to considerably exceed the usual B assessment. Under Schedule D actual income bears the tax. Corporations normally pay income tax under this Schedule on income from their industrial activities. Under this section proper accounting procedures must be followed by the taxpayer. Newly planted or replanted forests may be handled under this Schedule while the taxpayer keeps his mature forests under Schedule B. Under D, he may write off losses on young forests currently against other income or carry them forward for a period of six years. The tax authorities provide quite reasonable allowances for costs and depreciation under this Schedule.

This outline, in reference to the treatment of forest lands, probably has little application of interest to companies, as private woodlands are largely in the hands of individuals. However, it does show how the United Kingdom has used its income tax legislation to favour good forestry.

The tax rate for corporations under the income tax act is a straight proportion of taxable income.

Under the profits tax act, companies pay additional percentage taxes on the values of undistributed profits and dividends. The company withholds the tax on the latter from its stockholders. Double taxation occurs because this dividend income is taxed under the personal income tax.

Corporation Duty

Every corporation pays a 5 per cent duty on the annual net value, income, or profits of all real and personal property held by the firm. This duty tends to offset the escape of corporation property from death duties.

The Land Tax

This minor tax is based upon gross estimated annual income used in assessment of income tax under Schedule A of the income tax (the annual rental value). With this tax, the authorities have provided a sensible and interesting feature. A taxpayer may redeem the tax at a price equal to 25 times the 1939 - 1940 assessment: that is the capital value of the tax at 4 per cent interest. For corporations this would prove a useful method of obviating a nuisance tax.

The United States

The general pattern of taxing powers in the United States

resembles Canada's. The federal government exploits many of the same fields as the federal government in Ottawa. Similarly, the states and provinces. However differences do occur in emphasis. For example, as a state tax, distinct from a municipal one, the property tax is important. This is in addition to its great significance at the lower level. And this tax generally differs from the Ontario municipal property tax because it usually covers tangible personal property (and frequently intangibles) besides real estate.

Because of the multiplicity of jurisdictions among the states of the Union, only the federal and state taxes with direct bearing on this study will be reviewed. TAX SYSTEMS, published by Commerce Cleaning House Inc. (28) provides complete outlines of all state and federal taxes.

Forest taxation in the United States has long been discussed by foresters and others interested in promoting the sound management of the forests. This attention has largely focussed upon the taxation of forest property. The reason for this lies in the ownership pattern of forested land in the country. Many corporations have large holdings of forest land.

The United States possesses over 460 million acres of commercial forest land, about three-quarters of its total forested area. Individuals and corporations own 345 million acres of com-

mercial forest and some 65 million acres of non-commercial lands. The privately owned forests yield 90 per cent of annual American timber cut. Over 4 million small holdings averaging 62 acres make up 76 per cent of the private commercial forests. Some 3600 people hold the remainder in lots over 5000 acres in size. Lumber and pulp and paper companies hold some 51 million acres. About one-third of the country's forests are publicly owned or managed and the major portion of this area lies within the National Forests.

The National Forests contribute 25 per cent of the gross revenues from the sale of timber and other commercial transactions, to the states. This is for distribution to the counties in which the Forests lie, as payment towards the building of schools and roads. Another 10 per cent of the Forests' revenues goes to the U. S. Forest Service for use in constructing and maintaining roads and trails in the Forests. Presumably the remaining funds combine with other Forest Service revenues to swell Treasury income and offset the much larger expenditures on National Forest administration. Revenues from the state forests form part of the states' annual receipts. The different taxing jurisdictions do not tax each other's lands.

This outline of American taxes covers; the Federal Income Tax; State Income Taxes; and State Forest Taxes and Severence Taxes.

The Federal Income Tax

Domestic American corporations pay two federal income taxes - a normal tax and a surtax. These both have progressive rates. Capital gains are taxed but at proportional rates, considerably lower than the income tax rates. These taxes are levied under the Internal Revenue Code (26 United States Code). A taxpayer may claim the usual depreciation, obsolescence, and depletion allowances as well as deductions for ordinary and necessary business expenses, interest on indebtedness, state taxes (except succession and estate duties), bad debts, and losses. Losses may be carried forward against the two following years. There is double taxation of corporate net income.

Tax authorities compute depletion allowances on a cost basis or value as of the year 1913. However, when timber is cut or sold, it is valued at its fair market value at the first of the year when cut. Any difference between the depletion basis for the timber and this fair market value, the forest operator may claim as capital gain or loss.[1] He treats it accordingly for tax purposes. This provision recognizes the appreciation in value of the timber capital over the years and provides for taxing it properly as capital gain.

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1. The "Bailey Amendment" - 78 Congress, 2nd Session, vol. 58, pt. 1, chapter 63, section 127. This amends section 117 of the Inernal Revenue Code (26 U.S.C.).

State Income Taxes

Thirty-three states tax corporate net income; usually at quite moderate rates. None separate income from logging operations from revenues arising out of industrial activities. They all provide allowances for depletion, depreciation, and taxes other than income taxes paid to other jurisdictions. Quite a number of states exempt these income taxes from further taxation. A very few exempt capital gains. Many do not allow deductions for capital losses or else limit those they allow to the extent of capital gains. Several states allow companies to carry operating losses forward for two years. Double taxation of dividend income appears to be common.

State Forest Taxes and Severence Taxes

Twenty-five states provide for the optional separation of forest property from other property for taxation under their general property taxes. They have done this in order to favour the growing of timber. As part of the tax act, most states require a taxpayer to classify his forests in some manner if he is to derive benefits from the special legislation.

The usual arrangement for special forest taxes is to separate the land and trees for tax purposes. The land may be taxed as other real estate or may be given fixed rates of assessment. These will be lower than the common assessments for real property. The timber may be exempt from taxes entirely or for a

given number of years. Usually a yield tax is levied upon the stumpage value when the timber is cut. A few states evaluate the timber and give it special low assessments. Some states limit the application of tax benefits to reforested lands and usually all states have regulations concerning the sizes of forest areas suitable for classification under their acts.

Two states provide bounties for tree planting.

Most states have their forest taxes administered locally, a certain percentage being apportioned to the state treasury and the remainder being retained in the locality. Six states using the yield tax, collect the tax and make provision for payments to the local governments in lieu of these taxes.

The general concensus of opinion among foresters is that as measures to stimulate good forest practices, these tax acts have not been successful. Only small percentages of the eligible lands have been classified and are able to benefit from these special taxes.

Six states levy severence taxes on the quantities of forest products cut each year. The rates per unit vary according to the product. Three of these states impose these taxes in addition to their forest taxes.

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The interesting features in American forest taxation are the state forest taxes and the Bailey Amendment to the federal income tax. The former provide examples of earnest attempts to improve forestry by attacking inequitable features in the local taxes. That these efforts have not been more successful is due partly to the minor importance of the local property tax in forest finance. There are of course many other factors in the problem. The Bailey Amendment brought about a change in taxation where it bore heavily on all operators. In the general progress towards corporate management of the forests and their re-organization on a sustained yield basis, this amendment should prove significant.

Chapter V

TAXATION AND TENURE

The tenure of forest lands in Ontario touches upon many aspects of forestry. Because it is part-and-parcel of the Province's problems in establishing proper forest management, tenure bears upon taxation and the raising of Provincial revenues. For a fuller understanding of this aspect of taxation, it is desirable to examine briefly the economic significance of tenure, some of the principles behind our tenure patterns, and the historical development of forest tenure in the Province. From this analysis certain relationships between taxation and tenure are clarified.

The Economic Significance of Tenure

It is probably not incorrect to assume that Canadians believe that their governments, within the bounds of the constitution, should accept ultimate responsibility for the proper utilization of the country's resources. However, while theoretically it is possible for the state to do virtually anything if it is for the betterment of society, practically it must try and devise methods for achieving its ends within the community's cultural framework. Of significance then is the ancient institution of property whose rights and privileges are derived through English Common Law.

A pervasive institution, property determines a person's rights and duties regarding the use of a given area of land by himself or others. By these rights which can be transferred, it conditions minor institutions such as leases, licences, and agreements. And through the title to products of the land, property influences prices, values, income, taxes, etc.

As one of three factors of production - land, labour, and capital - land has many uses. The pivotal point about which we erect our land use schemes is the institution of property. In the use of the forests each man's relations with another hinges upon property be it publicly owned and operated, publicly owned and leased, or co-operatively or privately owned. Canadians with half a continent to settle, have come to accept the dichotomy in property ownership between the state and the individual - either personal or corporate. Furthermore, there is a presumption that successful methods of resource development can be evolved based upon these two differing forms of ownership. Of Ontario's 237,200 sq. miles of forested land the Province owns 94.2 per cent; individuals and corporations own the remaining 5.8 per cent, Canada, (15).

Within this framework that property provides, the Province has built up a system for the disposal of its timber resources. The following section outlines the main developments in forest land tenure since 1826.

Forest Land Tenure in Ontario

Prior to 1900

In early colonial days the Crown granted lands to settlers. Settlement requirements appear to have been limited to clearing and improving the land for agricultural purposes. In some instances settlers were required to do military service if called upon by the governor. Throughout the instructions of both the French and British governments to their governors in Canada, one reads of the reservation first, of all the oak on land grants and then the pine that would be suitable for use by the royal navies and the military, Report of 1899, ((67) pp. 23-48).[1] Later, instructions were given for the setting aside of forest reserves for the same purposes. The British government instituted the system of granting to British contractors for the Royal Dockyards charters or licences to cut timber in Canada for the Royal Navy. As mentioned in Chapter III[2] this monopoly system was badly misused. Reforms followed in 1826.

Lieut.-Governor Maitland's proclamation in that year opened the forests for commerical operations by anyone interested and able to pay the timber dues levied by the government. No licensing system is mentioned in the proclamation. However, under instruc-

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1. This part of the Report contains a good reveiw of Crown timber regulations of French and British Canada up to 1826.
2. See p. 77 above.

tions from England the Surveyor-General of Woods and Forests came to Canada to organize the disposal of timber limits and licences to cut. It is interesting to speculate on the reasons why timber was to be disposed of by such licences rather than by the sale of timbered lands. Licensing seems to have been along the lines of traditional disposal methods. It is not unlike the earlier charter system. In addition, the government would retain control of the lands which when cleared could be used later for settlement. Possibly then, licensing was viewed as but a part of the means for orderly settlement of the country. It did not prevent large areas of timberland from being purchased under pretexts of settlement, Report of 1899 ((67) pp. 57-59).

At this time, licences were to be limited to forests unsuitable for the Royal Navy. These licences extended for nine months, the timber contracted for having to be cut within that time. No mention is made of renewal of contracts. It is reported that many of the instructions from England were not carried out and we may surmise that at that time there was little difficulty in the way of obtaining a renewal of licences.

As time passed, questions of renewal seem to have caused some trouble for in 1842 the Commissioner of Crown Lands issued instructions clarifying licensing procedures. Licences were to be valid for a given period - apparently one year. Renewals were granted but if the licensees failed to claim renewal within a given period of time, the licence could be auctioned again.

The former licensee would be allowed the first bid. In 1846 these instructions were followed by regulations giving the right of annual renewal to the licence holder. Requirements on the part of the operator were limited to payment of Crown dues and to cutting the minimum amount of timber contracted for.

Opening the forest to commercial exploitation did not prevent monopoly. Neither did the levying of Crown dues nor any other regulations. Apparently many limits were acquired by single operators in order to control timber supplies. In 1851 ground rent was charged in an effort to prevent individuals acquiring extensive limits for monopoly and speculative purposes.[1]

A Select Committee of the Legislature appointed in 1854 studied amongst other things, the American system of disposal of forest land by sale. As mentioned above they failed to recommend its adoption in Canada.[2] This did not settle tenure grievances which apparently were being voiced. For in 1863, another Select Committee urged that something be done to give greater stability to tenure of forest lands. This recommendation was not made with a view to encouraging better forest practices but rather to prevent excessive cutting (in order to live up to licence requirements) and flooding of the lumber market. It is probable

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1. See pp. 17 and 76 above.

2. See p. 17 above.

that it was also aimed at resolving conflicts between lumbermen regarding the boundaries of their limits and between lumbermen and settlers.

Under his timber licence the operator obtained full title to all species of timber on his limit. However the government always retained the right to permit settlement on lands held under such timber licences.[1] The settler's rights to the timber on his lands in contrast with the timber operator's rights by virtue of his timber licence were not clarified until 1860. At that time if a settler only held a licence of occupation (rather than a patent), he obtained no title to the timber on his land.[2] In 1869, an Order in Council, Report of 1899 ((67) p. 115), reserved to the Crown all pine trees on settler's patented lands. The settler could clear his land of pine for agricultural purposes, for fuelwood, and for building materials. He could not cut it for sale although he could cut all other species. A timber operator could be granted a licence to cut reserved pine on patented lands. This Order settled this aspect of a licence holder's tenure and the rights such tenure conferred.

In 1892, the government altered its policy of granting licences

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1. 23 Victoria, Chap. 2 (Canada) s. 16. This act clarifies this point which had been a part of government policy up till then. See also: Ontario, Commissioner of Crown Lands. Report, 1872, p.x. In Sessional Papers, 2nd Session, Parliament of the Province of Ontario, vol. V, pt. II, paper no. 14; and Report of 1899, ((66) pp. 113 and 114).
2. Ibid.

for all timber species on an area and limited operators to cutting pine, Report of 1899 ((67) pp. 124-125). In theory the government was then free to grant further licences for the other species. These licences would overlap those for cutting pine. By this time the manufacture of pulp from wood was becoming an established industry in the Province. In a move to support this new development which required extensive timber reserves, the Province amended the Crown Timber Act in 1896[1] to allow the granting of pulpwood concessions. By agreement these concessions gave the operator tenure of his holdings for 21 years and the right to cut pulpwood species. He could renew his agreement for a further 21 year period if he had carried out all the requirements of the contract. The period of 21 years seems to have been chosen as the length of time necessary for the pulp and paper companies to write off the capital investments in their mills and machinery. It prevented alienation of lands to lumbermen.

This review shows that by 1900 the basis had been laid for today's system of timber disposal. Timber licences were granted for one year, renewable annually. Pulpwood agreements for 21 years could be obtained, renewable for a further 21 years. The government retained the right to cancel licences or agreements if the operators failed to abide by their contracts. Furthermore, the Province could grant to settlers portions of land included

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1. 59 Victoria, Chap. 12 (Ont.).

in any licensed area for the clearing of timber was part of the policy of land settlement. Few requirements were laid upon the operators: they must pay dues and ground rent; make certain returns to the authorities concerning their annual cut; and abide by forest fire prevention regulations. While pulpwood agreements gave extended tenure to pulp and paper companies, it was not done to encourage forest management. Rather the long tenure guaranteed the companies an adequate (often an excess) reserve supply of raw materials large enough to ensure continuous operations until capital investments in the mills had been recovered. These pulpwood agreements could overlap areas already held under timber licences to cut pine.

Twentieth Century Developments

The only significant development since 1900 has been the inception of the timber agreement. Subject to the annual renewal of his timber licence, an operator could enter an agreement with the Province which would provide him cutting rights on an area for a period of 10 years.[1] This arrangement brought the tenure benefits of the pulpwood agreement within the grasp of the lumber companies.

Neither under the timber licences nor under the pulpwood or timber agreements does there appear to have been any real insecurity of tenure. True, the period of tenure was often short

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1. Such agreements were first effected around 1943.

but that did not mean insecurity. Based on the precedent of successive renewals, security seems to have been sufficient for the day. Certainly few lumbermen were interested in retaining their lands once they were cleared. And the system did result in land being cleared for settlement. In this respect things often went too far with many areas being stripped of forest cover which were patently unsuited for farming.

Present Tenure Problems

The tenure problem that is with us today is one not met with before. It arises out of the change in the government's forest policy from one of liquidation to one of sustained yield[1] and out of the realization of the need for a sustained yield of pulpwood if the pulp mills were to remain long in continuous operation. As indicated earlier, property rights are closely bound to any activities dealing with land. And the government's change of policy called for reconsideration of the property rights granted to the holders of timber licences and pulpwood agreements.

As shown above, concern for forest tenure and rights under a liquidation program was really a concern for the orderly execution of policy. There was little doubt that it would be successfully

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1. This would appear to have been around 1925. In this period the following statutes were passed: The Forestry Act - 17 George V, Chap. 12 (Ont.) - and The Pulpwood Conservation Act - 19 George V, Chap. 13 (Ont.).

carried out. However, under sustained yield management, tenure and property rights may be the key factor in the success of the government's plans. Injustice to individuals is hardly at stake any more.

Simply stated, the problem rather than immediate is one of ultimate security of tenure. Committed to responsibility for the forests, the Province is seeking to take the measures now that are necessary to ensure that in the future the forest industries will have large stocks of relatively cheap wood. It is generally assumed that these stocks will only in part be obtained by large scale planting programs and that the most important means will be by natural reproduction following proper logging practices. Artificial regeneration will be used where desirable but due to the costs involved it is likely to be confined for some time to a minor place in the scheme of things.

Because the future is so closely wrapped up with the present, the success of the government's policy depends upon the co-operation of the forest operators. Their cutting practices have to be chosen so as to ensure the best possible natural reproduction; they have to be chosen with regard for the future. And this usually entails heavier logging costs. It also means well planned operation programs - a management plan for every forested area. The additional costs which these requirements call for are largely being met by the companies. Still further costs are entailed if sound management plans are to be put into

effect. And at present the limit and concession holders are being asked to bear most of these.[1]

Naturally the companies ask: who will get the future crops of wood? Will we have to pay stumpage after having paid the initial costs of ensuring the future forests? Can we not have a firm guarantee that our interests in these forests which we help create, will be respected 50 or 100 years from now?

Without going further into the problem of finding the answers to these questions, it is necessary to analyse the role of government charges in the whole complex matter. In this analysis, consideration is given to stumpage. This is done not only because it is one source of Provincial revenue but also because tax and other alternatives to the charge will be suggested in Chapter VI.

Taxation and Tenure

Stumpage

As stated in the previous section, the question of stumpage for successive forest crops is one of the leading ones in the tenure problem. For this reason a thorough understanding of what stumpage is, for what it is being paid, and how it is established

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1. In Chapter III, pp. 50 and 92 above and Chapter VI p. 173 below: the heavy costs of transition to sustained yield management - for all-weather road systems, permanent river improvements, recurrent forest inventories, etc. - were mentioned. Many of these costs must be and to some degree are now being met by the Provincial government. However the cost to the companies will undoubtedly increase markedly as the transition progresses. It is such costs which are referred to here.

is clearly necessary. In order to clarify the situation a little and to help one ask more questions, a model of the situation is again constructed.

Let us assume that the second crop of the forests in one region is nearing maturity. This is the end of the first phase of management for a sustained yield. Let us further assume that to achieve this condition, the government required the company operating the area to carry out a certain working plan and to use certain cutting methods. These methods were not the means most easily adopted for extraction of the previous virgin stand nor was the working plan the simplest possible under liquidation operations. But the company recognized both the power of the government and the interest that the company had in this future forest and co-operated fully. It paid for the increased logging expenses, for many of the improvements necessary to carry out the working plan,[1] and for a good part of the essential protection costs. Let us also assume that the government assisted the company by sharing some of the capital costs under the working plan and placed at the company's disposal the benefits of its forest research. Finally let us assume that both the company and the Province know

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1. Insofar as the government's stumpage dues may have been set so low that the company received a large portion of the economic rent owing to the government on the timber it may be considered that the company's expenditures on forest management are really those of the government carried out by the company.

fairly accurately their costs involved in bringing this second crop safely to its present state.[1] If the company is to cut this timber for its use, should it pay stumpage? If so, on what basis?

Stumpage is the price that the Province charges for its forest products. But in this model the products do not belong solely to the government if any consideration is given to equity. This second crop of timber represents the direct result of investments by the company in the land for which it has paid ground rent annually over the years. Some of the crop should belong to it. Furthermore, the government's share represents the people's investment for their future - for the contribution the forest industries would continue to make towards a stable, healthy economy. And through its income and other taxes, the company shares with the people in this, the Province's stake in the forest.

From this analysis one might say that under these conditions the company should pay for a portion of the government's costs in producing the second forest. That is, stumpage should be a price based upon a part of the Province's costs. This suggestion seems to raise almost as many question which are as

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1. It is probable that it will long be debatable whether certain Government expenditures should be included legitimately in the costs of management. It will be difficult to know always where to draw the line.

equally difficult to answer as the first ones.

Alternatively one might suggest that the company pay no stumpage. This second crop is but one of many more to come. If it follows its former policy the government will continue to ask the company to share the costs of forest management. Would it not be wise to regard the government's investment as the people's cost of keeping their economy running - a cost shared by all who are able to do so. This suggestion seems reasonable, for the costs of forest may well increase for some time until the proper degree and quality of supervision and care is achieved.

What difficulty there is in deciding this issue seems to stem from the fact that stumpage is regarded as a price charged for wood products - products whose ownership may be divided in subsequent rotations between the government and the company. Yet, from the point of view of the Provincial Treasury which receives all stumpage returns, these dues are just another source of revenue. And this revenue viewpoint is consistent with subsection 5, section 92 of the B.N.A. Act. Does it not seem simpler to avoid all the problems raised by trying to price successive timber crops in which both the government and the company have shared expenses? Cannot the Province raise the same revenue by means of taxation and then contribute its share towards the maintenance of the forest economy?

From this analysis it appears that the tie between tenure and stumpage is not exactly direct. Rather it is through rights in the equity of the successive forests which both the Province and the companies create. The solution to the tenure-stumpage problem would seem to lie in resolving the rights to the forest equity created by both public and company capital.

Have other government charges any bearing upon tenure?

Ground Rent

One is tempted to suggest ground rent as such a charge. For a rent is a payment for the right to use land or land and its improvements. A ground rent is the price paid for the use of land alone. It includes the right to improve the land and the occupant's title to the benefits of such improvements. Therefore the tenant of Crown lands should acquire definite rights and privileges by virtue of the ground rent that he pays.

As was shown in Chapter III,[1] it is doubtful whether the Provincial government ever considered that it conferred any such rights to licensees because they paid ground rents. When this charge was introduced in 1851 to prevent monopolies of timber limits, no licensee would have wanted to hold his limits any longer than was necessary to clear the land. He did not wish to improve the area. He was so settler; neither was he forestry conscious. His ground rents were a tax on monopolies

1. See pp. 75 and 76 above.

and speculation. And so they became a part of the Province's revenue system. For as order was brought into licensing the need for ground rents disappeared. Or if the need still persisted, other more effective means were sought to handle the matter.

In Chapter III the question was raised whether ground rents should be abolished. Unless the government makes some definite acknowledgement of the rights such rents nominally confer on licensees, they should be repealed. However with the Province's move towards sustained yield management, a belated recognition of the useful purpose that these rents could properly serve might provide the government with a very serviceable tool for solving its tenure problems. It is a means well adapted to the allocation of lands where one organization is the principal landlord. The rights conferred by rent can be clearly defined. It is an instrument fashioned to bring to the landlord any of the economic benefit accruing to him as a landowner. And this is what the Province has sought up till now in stumpage.

Succession Duties

In the discussion of succession duties in Chapter III, it was hypothesized that these taxes might upset the continuity of tenure of forest lands by certain types of companies. It was suggested further that this might conceivably disrupt some forest management plans. Only detailed analysis of actual occurrences will

reveal whether these hypotheses are valid and significant. If they are, the remedy is easily found as will be noted in Chapter VI.

Of the other taxes which forest industries pay, one may say that they have no bearing upon the problems of forest tenure.

Chapter VI

TAXATION AND FOREST POLICY

From the previous chapters it is apparent that for government, tax policy may be one of the devices it may appropriately use to promote full development and wise conservation of natural resources, Ilsley ((44) p. 4183). This chapter suggests the dynamic role which taxation may play in the support of proper forest management. It is hoped that some of the suggestions which follow may assist men in the forest industries, in government, and in the communities of Ontario to bring their forests to the optimum peak of production.

General Remarks

Psychological Aspect of Tax Problems

Before discussing some of the economic factors concerned with taxation and forest policy, it should be noted that problems created by taxation or associated with it often stem from psychological conflicts in individuals. Men in the forest industries sincerely assert their desire that their section of the economy should support its share of the costs of government. On the other hand, individually they strive to keep the taxes they pay to a minimum, to obtain tax concessions (often warranted), and generally give evidence of a healthy dislike for paying these levies. Prof. Mannheim ((56) pp. 303-305) noted this dual morality as a source

of social insecurity. In today's high tempo of living few take time to consider for what purposes they pay taxes or how important these ends are. And therefore their dislike of taxes grows stronger out of their indifference. Forest executives also have an acute dislike of tying capital up in investments over long periods of time while giving support to management for a sustained yield. They prefer to keep their businesses in as "liquid" a state as is consistent with good management. They fear losses. They usually favour short-run benefits from increasing prices, and often they find themselves after indulging in these benefits, saddled with mill requirements which urge them to act in a manner detrimental to their future interests. One may question as Dean Fernow did in 1908, (45) whether adjustments in taxation and tenure will have much success in overcoming these strong forces which impede much more than progress in forest management.

Forest Industries in Formative Period

In some respects the forest industries are only in their formative period. This is particularly so with the development of their forests in contrast to their plants and machinery. Management for optimum sustained yield has hardly commenced in Ontario - or in Canada for that matter. As the Royal Commission on Pulpwood, ((17) p. 120) put it we have kept our timber resources in a current account. Capital has been withdrawn continually when it could have earned interest - interest sufficient

to support our present industry.

Transition a Period of Financial Strain

Men in industry and in government will support E. T. F. Wohlenberg's statement, ((89) p. 361) that the transition from liquidation cutting programs - the cut-and-get-out-policy - to sustained yield management is one of the most difficult financial periods in forestry. It is the period when businessmen and government authorities must give up some of their hopes for short-run profits or revenues. They must hearken to the advice of foresters on the long-run requirements of the forests and on the long-term benefits which will accrue. To do this will not be easy. Companies have to listen to the pleas of their shareholders for adequate dividend returns and of their customers for greater production without increased prices; they have to face the increased costs of more permanent woods improvements; they must accept the problems of forest settlements.[1] Government authorities must accept heavier forest expenditures; they will have to pacify the insistent demands for more funds which arise from all sides or else place the burden elsewhere than on the forests; and they must co-operate with the forest industries in their efforts to meet the host of practical problems arising with forest management. In fact everyone in this Province and in Canada must intensify his efforts to think constructively and to plan for the forest economy.

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1. Many short-run costs such as these will have definite long-run advantages.

Challenges in Forestry

Planning, the positive approach to management, has replaced sheer exploitation. It is not a dreary prospect. Everyone makes plans; particularly businessmen and government officials. Now in forestry, the opportunity exists to make changes in our management methods, the chance to discard outmoded institutions and to combine sound and tested methods with new, progressive financial and administrative techniques. Now there is time to ask questions and to explore novel ideas, to discuss co-operative projects, and to run pilot studies.

Along with the forests' challenge today, there is that of the large corporation, vertically and horizontally integrated, which is a part of our industrial life. In the forest economy it may well become the dominant form. Exercising a local monopoly of forest resources that is virtually complete, such a company is a power for destruction - and for good. Undoubtedly the economies of large-scale business must be accepted. Indeed if the most is to be made of our forest wealth, integrated utilization in industry must become the keynote. It is up to the people and the government to weave these large industrial groupings into the scheme of economic life, to organize their great productive potential in such a way that the forests benefit by their existence and thereby society.

The problems of the social control of big business generally lie beyond the scope of this study. It is sufficient to note here

that taxation may become one of the most useful of society's means for carrying out such policies, Mo[illegible]eim ((56) p. 117).

Forests, Taxation and Land-use Policies

One of the qualities of the forests mentioned in Chapter I was their ability to utilize lands which may be economically submarginal for any other use. This fact alone means forestry should form a part of any land-use policy or program. And because taxation may reduce economic endeavour to the submarginal, it too must be considered in conjunction with such policies.

The Advisory Committee on Reconstruction

It seems pertinent to note here certain of the recommendations made by the Subcommittee on Conservation and Development of Natural Resources of the federal government's Advisory Committee on Reconstruction. Under the forest and forest industries section of the Subcommittee's report appear these comments:

> "Any form of silviculture will mean increased costs over present extraction methods. Present handicaps to adoption of improved forestry practices are:- i. Capital losses through uncontrolled forest fires, insect, or disease. These losses cannot be covered by insurance. ii. Insecurity of tenure of forest holdings. iii. Lack of any guarantees as to future tax burdens. iv. Uncertainty as to future markets." Etc., Canada ((13b.) p. 7).

Furthermore, the Subcommittee recommended the convening of a National Forestry Congress to reach a basis for co-operative action on many vital forestry problems. These problems included:- i. Continuity of tenure of forest holdings; ii. Reduction of anomalies as between provinces in forest holdings, charges, stumpage rates, employees' accident insurance costs; etc.; iii. Development of a satisfactory program of future taxation of forest lands for the purpose of promoting sustained yield operations; iv. Marketing facilities, tax concessions or subsidies required to reorganize forest industries on a multiple product basis to provide for efficient use of all raw materials; and v. Proper land use including forest settlements, forest holdings, etc., Canada ((13b.) p. 11).

Among the Subcommittee's long-term recommendations are these two:

"Selection by provincial authorities of units of the forest industry (or sites for the establishment of such units), which should be considered in the light of a planned natural resources development as essential industries, provided that such industries under a 99-year renewable lease may be required to develop manufacturing processes to use all raw materials available in forest holdings"

"Based on adequate forest inventory data, allocation to such industries under a 99-year renewable lease of a contiguous forest area of sufficient size to provide a continuous flow of

raw materials, such area to be retained by the industry under agreed financial terms as long as operated under proper forestry principles mutually agreed upon." Canada ((13b.) pp. 11-12).

The report of the Subcommittee provided a blueprint of action needed to promote good forestry in Canada as a whole and in the provinces. It is apparent that taxation and tenure were important items in the opinion of the committee members.

Taxes, an Indirect Influence

The views of H. L. Lutz and other tax specialists concerning taxation should be noted here, Lutz ((54) p. 14), Wohlenberg ((89) p. 361). Taxes, while appropriately used as means for the encouragement of forestry or any other government policy, should not be designed to achieve these ends by providing any direct incentives. These men believe that having helped to provide order in business activities, taxes should be no hindrance to business enterprise. Changes in taxation should be aimed at smoothing out or keeping smooth the flow of industrial production. In effect they propose that the government should lighten the tax burden to achieve its desired ends rather than threaten to increase taxes if the ends are not accomplished.

Tax Policies and the Forest Industries

In support of the contention that the forest industries do deserve more favourable consideration in government tax policies

the following points may be cited:

i. The task of returning the forest resources of Ontario to their former productivity and maintaining them at an optimum sustained yield for the benefit of all, is one which will cost large sums of money. This financial burden must be borne by all who are able to do so. Because of their integral part in such a task, the forest industries should be given every assistance to help them bear their share of the financial loads. It is an example where special considerations to lighten the tax burden are called for by the urgency and size of the task to be accomplished. This is the short-run aspect of a long-run program of action. And it will be action which will bring the forest resource to a state where it will be more able to bear its share of government costs.

ii. The burden of the present taxes may be considered equitable because they are levied upon all or most industries in a like manner. However income taxes, for example, make little provision for the differences between industries (e.g. the forest industry and the shoe manufacturers) arising out of requirements for re-investment of earnings for future operations. In other words, a forest company, if it is to bring its forests under good management will have to incur heavy expenditures for roads, silviculture, etc., expenditures the like of which no shoe company faces. True, these heavy charges may be the result of the forest company's own past actions in over-cutting

(frequently "mining") its forests. But such actions were wholly in keeping until recently, with the outlook of the times.

iii. Already the mining industry receives substantially better tax treatment than does the equally essential forest industry.[1]

These are not new arguments for preferential tax considerations. But they are still valid and still among the strongest in favour of such government action.

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Because taxes are levied by governments most of the suggestions which follow will be directed towards steps which these bodies could take to stimulate better forestry on the part of the forest industries in Ontario. A later section contains some recommendations for thought on company policy in this matter. These suggestions are made with full awareness of the need for research and study to test their validity. They are proposed in order to encourage such study rather than to provide a certain path out of our present situation.

Concerning Government Policy

Corporation Income Taxes

The Federal Income Tax

From the review of the British income tax in Chapter IV one point stands out. This is the use of the income tax as an in-

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1. See pp. 59 to 62 above.

strument to foster good forest management. In the administration of the Canadian Income Tax Act there have recently been made some very progressive and advantageous changes - changes aimed at adapting the Tax Regulations to the movement of the forest industries towards proper forest management.

Forest Management Expenses. Forest management expenses such as salaries for foresters, and protection and reforestation costs, generally receive treatment as current expenses, deductible from income in the year in which they are incurred. The qualifications to this statement are that such expenses should bear a reasonable relationship to the size of current logging operations and that they must also pertain to management areas supplying wood to present conversion facilities. In effect, these management costs are expenses incurred for the purpose of gaining income.

If management expenses pertain to areas held for future expansion of the mill or for timber to be sold they are classed as capital expenditures. As such areas are brought into production these capitalized expenses may be recovered by means of depletion allowances.

Depreciation Allowances. Treatment of depreciation of capital expenditures under the Income Tax Regulations is on the basis of a fixed percentage of a diminishing balance of the capital cost of the item. This basis, rather than a straight line or fixed

percentage of the initial capital cost, was adopted for tax purposes to counterbalance the usual rapidly rising maintenance costs of any capital item as it grows older. That is, larger depreciation charges are allowed before maintenance costs become heavy.

Recent changes in this part of the Regulations dealing with allowances for capital costs, have favoured the forest industries. Two optional treatments of these costs have been provided. Prior to the changes, property which would have no use in cutting or extracting timber after a limit was cut over (e.g. camps, haul roads, mechanical equipment), had usually to be depreciated on a straight-line basis over the life of a limit; that is, depreciation allowances were granted at a rate per unit of wood cut, based on the inventory of the limit. Today this method may still be followed but an alternative is provided. Such property may also be depreciated at a rate of 30 per cent annually on the diminishing balance basis.[1] However the taxpayer having chosen which method he will use for an item of this nature, may not later depreciate it by the alternative method.

Another favourable amendment to the Regulations provides that forest management expenses of a capital nature (such as access roads and trails for protection purposes) may be depre-

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1. Previous to this change some mechanical equipment was depreciated for tax purposes at a rate of 20 per cent.

ciated at the 30 per cent rate. Previously permanent roads received a rate of only 4 per cent and it was always doubtful whether any allowance whatever could be claimed for protection roads and trails.[1]

These recent changes indicate that the federal departments of Finance and National Revenue are becoming well aware of the financial problems involved in the swing to sustained yield management. The changes are probably the most favourable that could be expected under the circumstances. For under the 30 per cent rate allowed, three-quarters of the capital expense may be written off in four years.

This favourable treatment should reduce any company reluctance to embark on forest management, that arises as a result of income taxation. Less money now will have to remain tied up in capital expenditures which will be subject to uninsurable risks of loss from fire or attack by insects and disease. There will be less taxation of what R. Goode called "imputed" costs.[2]

Depletion Allowances. Depletion allowances under the Regulations have not been altered along with the recent changes in treatment of depreciation. It is difficult in an extensive study such as this to assess the real importance of the problem raised

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1. There were instances where such claims were disallowed by the Department of National Revenue.
2. See pp. 44 and 45 above.

in the taxation of capital gains in timber which has been held for many years.[1] Where limits are held under long-term management from the Crown the problem will hardly arise especially as the Provincial government prohibits speculation in timber limits. It would seem that the problem is a minor one in Ontario where such a large percentage of the forest is administered by the Province.

The system of depletion allowances provided in the Swedish income tax might be adapted in part to Canadian conditions.[2] However the reluctance of the federal government to define capital gains in the Income Tax Act will probably preclude such action. For unless a capital gains tax is imposed in this country, it will always remain simpler and far wiser strategically to define what is income and leave the remainder untaxed. The Success of the Bailey Amendment to the United States Internal Revenue Code[3] hinges upon the fact that capital gains must be defined as there is a capital gains tax under the Code. And yet the treatment of depletion in the mining industry does seem to indicate that if necessary, special legislation and administrative action can be taken to alleviate undue tax burdens.

The carrying forward of depletion allowances as is per-

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1. See p. 57 above.
2. See pp. 122 to 124 above.
3. See p. 150 above.

mitted in Sweden,[1] might be a desirable innovation if adopted in Canada. However it is unlikely that such action would be permitted in Canada until there is a general move by the federal government to allow the carrying forward of losses and the averaging of income over a two or three-year period. These are features of Swedish and British income taxes.

The Ontario Income Tax.

As mentioned above,[2] the Ontario government accepts company depreciation deductions made on the same basis as provided in the federal Income Tax Regulations. Whether the recent changes adopted by Ottawa will be similarly adopted by Ontario, the author cannot ascertain. It is to be hoped that the past uniformity of action which has existed will be continued in this matter. As the Provincial government is responsible for the inception of forest management, it should be among the first to adapt its corporate income tax to this change in forest policy.

As in the matter of capital gains and the federal income tax, the Provincial government is unlikely to take positive action to define capital gains. However if the problem is one which inhibits companies from progressing with their forest management plans, then it is proper that Ontario should take the lead in giving a definition to capital gains in order to prevent their taxation under present legislation.

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1. See p. 122 above.
2. See p. 57 above.

The problems of depletion and depreciation discussed above are in many respects special to the forest industries. However, there are other aspects of corporate income taxation which while general may have significance to the forest industries. The carrying forward of losses and the averaging of incomes are examples. Another which is largely a problem in provincial taxation is the allocation of income[1] to its proper situs. As mentioned above, the Tax Rental Agreements between many of the provinces and the federal government have obviated this difficulty in the agreeing provinces. It is doubtful whether the use of the same allocation formula throughout this country would result in much change in provincial revenues. It is possible that Ontario may enter a similar agreement with Ottawa.[2] But until such time, uniformity in allocation formulae and in other tax matters would help to minimize industry's troubles in making out its tax returns. It would eliminate possibilities of discriminatory tax differentials.

Provincial Corporation Taxes

The place-of-business tax in Ontario is one which really has no place in the Provincial tax system. The tax on paid-up capital also has little merit. If the Province hesitates to repeal such nuisance levies, consideration should perhaps be given to that practical feature of the British land tax by which the tax-

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1. See pp. 54 to 56 above.
2. This agreement has been signed. See the Foreword.

payer may redeem the tax. He does this by paying in a sum equal to the tax's capital value at some low percentage.[1] In this manner the taxes could die a natural death.[2]

Land Taxes

As suggested above municipal and provincial property taxes are likely to remain a part of their respective tax systems for many years. As it is difficult for municipalities to change independently the basis of valuation of forest lands, it is up to the Province to make the move towards evaluations based on the productive capacity of the forest soil. The Province has both the necessary authority and the resources of money, knowledge, and personnel. The county of Sunbury in New Brunswick has made an interesting attempt to broadly classify lands for tax purposes roughly according to site quality. Their experience would probably be a valuable guide to changes that are possible in Ontario. The author realizes that nothing could be done in this country on the scale of the Scandinavian land and income taxes. Nor is it actually desirable to do so in this extensive Province. But there is no real reason why some action should not be taken now to improve our present unsatisfactory assessment basis.

Adaptability to local administration has given the property tax its prominence in municipal finance. The success of the

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1. See p. 147 above.
2. These two taxes have been suspended by the agreement. See the Foreword.

Scandinavian local income taxes should be studied. Many people have felt that such taxes are not good taxes for this country. But if municipal tax systems are to be diversified, the income tax can prbably be adapted with success to local administration -- particularly as practice in public finance has shown marked improvement since such taxes were repealed in 1936.

Succession Duties

Neither the federal nor Provincial succession duty acts recognise trees as being a form of property which differs from any other form. Trees normally form but a part of any property in Canada. No treatment is given like that which taxpayers in Britain receive under the British acts.[1] There is merit in the British provision for evaluating the trees separately and for payment of duties when the timber is cut. Furthermore, the cancellation of all duties on such timber on the death of the legatee, prior to a revaluation of the property, is a rational provision which fairly recognizes the true nature of the forest - that it is the land's only crop and should be taxed only once. Incorporation of similar provisions in the federal and Ontario acts would ensure that these statutes will in no way hinder the progress of forest management in Ontario.

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1. See p. 145 above.

Taxation is one of the elements in the country's economic climate which governments can control. And with co-operation between all levels of government it would be robbed of any capriciousness and given clear form. Another element perhaps equally as important is government expenditure. References in Chapter III above[1] will indicate the close tie between expenditures, taxation, and forestry.

Stumpage and Ground Rent

In the section dealing with stumpage in Chapter III some doubt was cast on its efficacy as a means for raising Provincial revenues. The ability of the Provincial authorities to continue to price their forest products in a fair and proper manner in the conditions of modern business which grow evermore complex, has been questioned. The possibility of increasing present stumpage rates sufficiently to yield the revenues necessary for increased Provincial expenditures on forestry, is not great if the competitive market positions of the forest industries are not to be endangered.[2] Furthermore, stumpage appraisal is viewed as an improvement on previous methods of stumpage evaluation only if it is an interim measure. It will not solve the Province's tenure problems. Are there any alternatives to Ontario's continued reliance on stumpage as the main source of revenue for financing

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1. See pp. 63, 74, 83 to 85 and 93 to 95 above.
2. It is not meant to imply that stumpage evaluation ought to be dependent on forestry expenditures. The author firmly believes that if stumpage is to be retained, there should be no direct relationship between the two.

the Dept. of Lands and Forests? Will these alternatives help to solve the forest tenure problems in Ontario? In answer to these questions the following suggestions are made for further study in theory and in practical detail.

To avoid the problems of pricing forest products from Crown lands and to avoid equity problems in successive crops of timber under management, the abolition of stumpage is recommended. On the other hand, under the system of ground rents presently in force, a clear definition of the tenure rights which such rents should convey would simplify tenure and equity problems in timber from sustained yield management of Crown lands. Licensees and agreement holders through payment of ground rents would obtain full title to all timber they grew on leased or licensed land. Control of company management practices could be handled under the Crown Timber Act as it is presently constituted. The adjustment of rentals might be made at three or five-year intervals. Some difficulty is envisaged in the actual establishment of the rental rates. However a system based upon the site quality of the forest land could surely be evolved. This need then have no direct bearing on the crops of timber actually produced nor on their market values - values which may be difficult to establish under present marketing methods. The productive capacity of broad classes of forest sites could be found and used as the basic standard for rentals. This standard would assume reasonable management for a sus-

tained yield of different forest crops. A nominal and reasonable value based upon an adequate appraisal of actual values could be given the best sites in a forest region. The other classes could then be given values based on their relative productive capacities.

If the revenue yielded to the Province by ground rents is not sufficient, it is recommended that the Provincial authorities consider raising the additional money by use of the income tax or a very moderate severence tax based upon the quantity of wood products cut. It is recognized that discussion of the increased expenditures by the Province which are envisaged in order to bring the Province's forests under proper management falls largely outside the scope of this study. It seems reasonable to suggest that these expenditures be not limited to what revenues the forests may directly yield. However if it prove necessary to do so, then the use of a surtax on income of the forest industries or a severence tax, clearly earmarked for such special use can be justified.

Forest Management Fund

This raises the point of the establishment by Ontario of some sort of Forest Management Fund, somewhat along the lines of the French Forest Improvement Fund. If such a fund were set up it could be maintained by the specific taxes described above. Its use could be publicized and the special taxes which support it

would add to the effect of driving home to the public the need to be forestry conscious. Furthermore by using such specially designated taxes, non-forest industries which benefit from the forests (such as the tourist industry) could be called on to share in the expenses of caring for the forests. While there is no formal highway improvement fund that the author knows of, the present gasoline tax is an example of a specific tax to pay for the special benefits that motorists receive through the provision of good highways.

The experience of the United States in the use of tax exemptions and special forest yield taxes in the place of regular property taxes, is illuminating. And experience in Ontario[1] supports the point that inducements of that order have little success in promoting good forestry. It is probable that a Fund available for forestry loans at nominal interest rates would be preferable. European forestry has found a useful place for such forest financing.

Concerning Company Policy

As the forest industries pay rather than levy taxes, their action along the line of a positive tax policy may seem of minor significance when compared to possible government action. However the forest companies have a rather large measure of public opprobium to overcome concerning their treatment of the forests before they can expect much public support of tax changes in

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1. From conversations with Provincial authorities.

their favour. In this matter much has been accomplished and greater success may be expected as proper forest management plans are carried forward. Honest publicityoof such actions will serve the dual purpose of gaining public approval and increasing the public's own awareness of the problems that good forestry poses. The essential part played by the forest industries in our economy is still largely unrealized by the man in the street. And furthermore, persistent and concerted action by all companies in presenting the true facts of their position to pertinent government authorities would probably bear fruit where previous claims have been unsuccessful because of a lack of organized pressure.

To prove their willingness to bear their fair share of the tax burden, the forest industries should show a real desire to provide the facts and figures of their business when it is necessary to show that tax changes are in order. For it is only reasonable that before legislative or administrative action can be taken on the government's part, the authorities should be fully conversant with all details. This is a difficult proposition in the complex structure of our present-day business economy, particularly if industry feels that the government is liable to take unfair advantage of such important information. Yet there does seem to be a need for greater trust and co-operation in the relationship between government and industry in this field of finance. If co-operation on industry's part is not forthcoming one can only

expect the government's tax instrument to be dull and inexpertly handled.

As mentioned in Chapter III, there is some doubt today when forest executives speak of a lack of funds for investment, whether they mean investment in the forests or in plant facilities. At the present stage when the forests require such large amounts to be spent upon their rehabilitation, unmistakable examples of company investment in the future forests (possibly at the expense of some short-run commercial advantage to be derived from new plant), would do much to underline the many statements that men in industry make concerning their support of sustained yield forestry.

There is one more aspect of company policy concerning taxation. Where non-contractual costs or rewards for uninsurable risks are being taxed,[1] the forest industry should endeavour to reduce such costs to a minimum and convert them to contractual costs. As such they will be deductible from taxable income. If the Provincial government does provide the forest industries with full equity in the future stands of timber on their limits, then the incentive will exist to bring into existence adequate forest fire insurance.

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1. See pp. 44 and 45 above.

Do these suggestions on government and company taxation forest policy square with the points made in Chapter I? The renewable nature of the forests is recognized and full advantage taxwise is taken, if indirectly, by the promotion of good management. Present rigidities and friction in stumpage charges are removed and more flexible alternatives are provided. The essential and integral role of the industries based on the forests receives full recognition. Furthermore, if such policies were followed, more harmonious and stable relationships would probably ensue between the industry and government - relationships which should lead to more stable tax policies. Of greater importance in the suggestions is the incentive they would give to industry to enter into full partnership with the government and the people in operating the forests for the optimum sustained yield of forest products.

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INDEX OF ABBREVIATIONS

A.E.R.	American Economic Review
C.B.R.	Canadian Bar Review
C.C.H. Candn. Ltd..	Commerce Clearing House Canadian Limited.
C.C.H. Inc.	Commerce Clearing House Incorporated.
C.E.D.	Committee for Economic Development.
C.J.E.P.Sc. . . .	Canadian Journal of Economics and Political Science.
C.P.P.A.	Canadian Pulp and Paper Association.
For. Chron.	Forestry Chronicle.
J. For.	Journal of Forestry.
N.C.I.B. Inc. . . .	National Industrial Conference Board Incorporated.
N.T.A.	National Tax Association.
N.T.J.	National Tax Journal.
O.L.R.	Ontario Law Report.
Q.J.E.	Quarterly Journal of Economics.
S.A.F.	Society of American Foresters